

THE BYZANTINE INSTITUTE

THE MOSAICS OF HAGHIA SOPHIA AT ISTANBUL

THIRD PRELIMINARY REPORT
WORK DONE IN 1935-1938

The Imperial Portraits
of the South Gallery

by

THOMAS WHITTEMORE

Printed by JOHN JOHNSON at the
OXFORD UNIVERSITY PRESS
for THE BYZANTINE INSTITUTE INC.
SEARS BUILDING, BOSTON, U.S.A.

1942



CONSTANTINE IX MONOMACHOS

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THE IMPERIAL PORTRAITS OF THE SOUTH GALLERY

INTRODUCTION

THE deliberate and unhurried work of the Byzantine Institute in Haghia Sophia in Istanbul was conducted during four seasons from the 4th of May to the 4th of November 1935, from the 5th of May to the 24th of November 1936, from the 20th of May to the 23rd of November 1937, and from the 30th of April to the 27th of October 1938, with the aid of a group of eleven experienced craftsmen.

As in previous years the Turkish Government graciously afforded all necessary facilities and encouraged the Institute with its enlightened interest in the progress of the undertaking; especially as Dr. Hamit Zübeyr Kosay, Director General of the Museums of Turkey, Bay Halil Ethem, at that time Deputy in the Great National Assembly, and Bay Aziz Ogan, Director of the Museums of Istanbul, continued their valued assistance.

This work was carried out in the Narthex, in the South-West Vestibule, in the Eastern Apse, on the soffit of the Arch of the Apse, and in the South Gallery.

The mosaics thus far found and uncovered in the South Gallery are decorative patterns on walls and vaults, a Deesis (A on the plan) on the South-East face of the South-West buttress pier, and Imperial portraits (B and C on the plan) on the East wall of the Gallery on either side of the window next to the Apse and on the side of an adjacent pilaster (D on plan). Decorative patterns and the Deesis will form the subject of later Reports; the present Report deals exclusively with the panels of the Imperial portraits.

To the North of the window in the East wall of the South Gallery the wall shows Christ between the Emperor Constantine IX Monomachos and the Empress Zoe; to the South, the Mother of God with the Holy Child between the Emperor John II Comnenos and his wife Irene, and on the pilaster, the eldest son of John and Irene, Alexios Comnenos [1].

Hereafter in this Report the first of these panels will be called the Zoe Panel. It was rediscovered on the 2nd of July 1934, staging was erected on the 26th of August and the work of uncovering was begun on the following day. The second panel, to be called after John and Alexios, was found on the 2nd of July 1934, but the work of uncovering it was begun only on the 16th of

May 1935. Final consolidation and cleaning were terminated in October 1938.

These figures became known to the Fossati during their renovation of the Mosque in the reign of Sultan Abdulmecid between 1847 and 1849, together with another figure which they identified as that of Alexander, brother of Leo VI (Pl. XXXVII). We have not yet found this last figure and, from the presence of plaster later than the Fossati and evidence of thorough testing, we are reluctantly compelled to believe that it was shaken down by the devastating earthquake which destroyed so many other mosaic paintings in Haghia Sophia on the 10th of July 1894. Copies that the Fossati made of the imperial panels, before concealing them beneath the plaster which we have just removed, are fortunately—by the courtesy of Dr. and Madame Napo Fernando de' Torriani—reproduced in this Report, the original drawing in water-colours having come down to Madame De' Torriani from her grandfather, Giuseppe Fossati, in the family collections still at Morcote in Switzerland, the birthplace of these illustrious men.

It will be observed by a glance at the Fossati sketch and a comparison with the mosaics which we have uncovered that our work has consisted of disclosure and cleaning but not of restoration or other falsification [2].

A casting method is used for reproducing these mosaics in colour. First a soft brush, sometimes a sponge, dipped in water and squeezed out, is passed over the mosaics, giving the surface even less moisture than is observable on the interior walls of the building on a summer day of high humidity. On this moistened area two or three smooth sheets of cellucotton are then placed and tapped gently with the tip of the brush or sponge, so that the material takes the exact impression of the cubes. Successive layers of the same paper follow for a backing and this impressed pad, carefully removed from the wall and hardened with shellac, is used as the mould for making the plaster cast which is subsequently painted from the original mosaic. This method of recording the mosaics has perhaps a higher degree of accuracy than that of colouring photographs and tracings, since it reproduces the actual configurations of the tessellae, at the same time securing equal and absolute safety for the originals. An exact rendering of these figures is a task to be performed in terms of changing light as well as of colour and is impossible of achievement. But in coloured casts and in the skilful colour plates illustrating this Report, value and colour have been balanced to approach as nearly as possible at the moment the unattainable qualitative and affective spirit of the mosaics [3].

CHAPTER I

THE ZOE PANEL

THE mosaic painting of the Zoe Panel represents Christ enthroned between the standing figures of the Emperor Constantine IX Monomachos (1042–55) and the Empress Zoe (1028–50) [4].

Originally the panel was almost a square 2.40 metres wide and 2.44 metres high. A strip of the mosaics, 35 cm. in height, extending across the lower part, is now missing. Above this, more tessellae are gone, exposing sections of the setting bed, and there are breaks in the mosaics surrounding the three heads, and in both Constantine inscriptions. These breaks strike an incongruous note and create a vital disorder in the picture. Indeed, scrutiny reveals the fact that all the existing heads have been substituted for earlier ones and that the ensuing tonal discord has rendered the original composition displastic and fragmentary.

But the present condition of the panels, we hasten to declare, must not be thought of as announcing deliberate and wanton desecration. On the contrary, in the seven years of our work on the mosaics we have found no evidence of intentional destruction or wilful mutilation of figures. Earthquakes and the exigencies of time have destroyed much and robbed the building of many of the greatest masterpieces of the art of mosaic painting, but those that remain have been preserved by the Turks during the almost five hundred years of their custody of Haghia Sophia [5].

The Zoe Panel is surrounded by a marble cove moulding, 4.5 to 5 cm. wide, serving not only its purpose as a frame but as a transition from the panel to the marble face of the wall. Passage from the gold mosaic background to the moulding is achieved by an outer line of red glass and an inner line of dolomite rock, similar in tone to the marble of the moulding. This bears comparison with the practice of modern painters carrying their painting into the frame.

The background is formed of horizontal rows of small gold tessellae. Silver cubes, so freely used in mosaic backgrounds of the sixth, ninth, and tenth centuries, do not here occur. In gold grounds silver is used, as white flowers near yellow in gardens, to save gold from looking brassy, but in these panels the large amount of dolomite rock employed to represent pearls serves the purpose.

Most of the individual cubes have a nearly flat surface, but a few sparsely

sprinkled have an ever so slightly rounded face. Cubes are set close to one another especially in the vertical interstices, only just showing the original fresco-tinting of the setting bed. The general surface of the mosaic is not limited to a plane but is slightly wavy, thus creating subtle and varied reflections of light which give rise to colour vibration and atmosphere. Gold is used not as in modern mosaics, to astonish by the conscious sense of splendour, but to move us unawares [6]. The colours chosen for painting the figures are pitched high to harmonize with the glowing gold of the background, and seem, for this reason, to attain an added glory [7].

Byzantine mosaic is the most organic—perhaps the only organic medium used in wall decoration—always an integral part of the building and equally durable. Everything is placed in accordance with its functional activity and varies in the use of light with the nature of the instantaneous disinterested action it is to evoke. Like calligraphy these representations are on a flat surface, the integrity of which would be lost if the artist attempted to create the illusion of space—the illusion of holes in the wall. Instead, by means of simple conventions of modelling in scale, incredibly subtle in their execution and with no use of linear perspective, the artist suggests the plastic form of the object he wishes to represent, not for information but to change the perception of the onlooker and lead him to reality [8].

The seated figure of Christ, considerably larger than that of the Emperor and Empress, dominates the standing figures beside it by its size, its dignity, and the depth of the blue of His vestments. These contributory figures lend emphasis to this domination by the slight inclination of the body, the turning of the head, the direction of the eyes, and the gesture of the offering of the gifts. Even the jewels of the imperial robes reappear on the book of the Gospels and on the throne in this progressive ordering of matter, which reaches through the right hand of Christ a focal point in the beholder.

CHRIST

The face of Christ is an ascetic face; palest flesh-tinted marble, perhaps from Algeria [9], gives a vivid pallor as if of interior light. Deep violet eyes, like refulgent obsidian, are turned in searching gaze. Light brown hair, parted in the middle, falls wavy to the back of the neck, three small locks lie on the centre of the brow. Both sides of the forehead are partly covered by the hair, leaving the lobe of the ear visible. A thin drooping moustache and short brown beard, slightly curled at the tip and darker in tone than the hair, accentuate

the emaciated flesh. The cruciform nimbus is outlined in deep flashing red and the face of the cross is jewelled in what seem to be beryls and pearls.

On either side of the head of Christ in large letters of architectural type are the monograms in black violet

IC XC

Ἰ(ησοῦ)ς Χ(ριστός), *Jesus Christ*

Christ's right hand is raised in the Orthodox gesture of benediction; unnaturally twisted, this hand turning sharply upwards in its movement like a flame, barely subsists as a hand at all in the symbolic rendering of the blessing.

The left hand is holding upright on the knee the Book of the Gospels. Heavy parchment of the leaves is shown below and on the right. The splendid cover is of gold and bears in its centre an equal-limbed cross of blue transparent enamel. Each limb is ornamented with two rows of pearls. In the middle of the cross there is a large round stone, like a clouded carnelian in claw-setting such as we see in the book-covers and reliquaries taken from Constantinople to Venice in the fateful Fourth Crusade. At the corners of the cover are four ornaments in the shape of ivy-leaves, in enamel, each of two colours, one half earth-green and the other an earth-red in two tones [10]. The Book is closed with three gilded leather straps, ending in clasps.

Christ is clad in blue *chiton* and *himation*. The *chiton* is visible on the right arm, the right half of the chest and, on the left leg, below the Book. Through the large opening of the sleeve on the right arm, is seen a gold armlet with a red foliated ornament and a cuff, like a bracelet of linked squares. On the right shoulder and the right part of the chest, the *chiton* is adorned with a wide gold *clavus*, the lower part of which reappears on the left knee and from there runs down the leg. Shadows of light olive-green and dark olive-brown on the *clavus* almost trace a design on the surface of the tissue.

Entirely covered by the *himation* are the middle of the body, the right thigh, and the right leg. The *himation* covers a small part of the right shoulder and from the other shoulder descends in zigzag lines down the left side of the chest, covering the whole arm and hand up to the fingers, hanging down from the forearm and resting upon the seat of the throne, from which it descends in a sculptural fold passing behind the *chiton* along the left leg.

Both vestments give the impression of being of soft wool, with shades passing from light amethyst to black violet. The blue glass with which they are wrought, however, because of its complete lack of air-holes, has not the luminosity of the ninth- and tenth-century glass used to represent the dye

and weave in the garments of the figures in the Narthex and the Vestibule. In these, the glass gives the effect of incandescence, charged with light, as light is drawn upon for exhaustless decoration. Verisimilitude is sought in these tissues by arranging the cubes on a basis somewhat corresponding to the natural folds of a woven fabric.

Christ is seated on a throne of marble, sparkling with gems. Three thrones, the one in the Narthex [11], the one in the Vestibule [12], and the one in this panel present evident differences in material, construction and, perhaps, even symbolism. The first is a palace throne of great splendour. The Throne in the Vestibule is more architectural and like the Throne of Ezekiel's vision—the colour of amber. Here, in the case of the third, the work is of a skilled *marmaropoios* of the time [13].

In shades of olive-green the throne appears to be cut from marble like that of the Proconnesian marble panelling beneath it. Gold strokes reproduce the brilliance of the stone in sunlight. The throne is composed of two parts, of which the upper is the wider. Two recesses are indicated on the side. The borders are dark-blue enamel edged with gold and studded with pearls. Three square semi-precious stones, or stonelike pastes, are visible on the upper part. The first and second from left to right are probably meant to simulate the reddish-brown of carnelian or of red chalcedony and the third the green of beryl or feldspar [14]—from its opaque appearance probably feldspar. The lower part of the throne is divided horizontally by a blue band similar to the one above. Two large rectangular blue stones are in claw-setting. Below the band, in the dilapidated part of the mosaic, remain fragments of stones in a similar cutting of carnelian red.

A blue-green cushion on which Christ is seated has the appearance of a long, loosely filled bolster, piped with two narrow bands of red and olive-green edged with gold. The ends are capped by rosettes of burnt sealing-wax-red and light olive-green, and are turned upwards and outwards by the weight of the body.

The feet of Christ rest on a circular foot-stool of gold rimmed in red, only traces of which remain.

THE EMPEROR

On Christ's right, all but touching the throne, is the standing figure, designated by the inscription above it as Constantine IX. The Emperor leans slightly towards Christ in offering the traditional *apokombion*, his gift of a purse of gold solidi [15].

Constantine's face is round and ruddy, in rose, lemon-yellow and olive-grey stone, used with sensitive variation for the substance of flesh; giving the impression of a rough complexion and of blood circulating under the skin—almost bronze or even copper. His forehead is drawn narrow, his brow salient; his cheek bones high, resembling the Scythian. His nose is straight, with sharply-defined wings. A small, weak, frivolous mouth, indicating an excess of humour, is partly hidden under a heavy moustache. The short flaxen beard frames the face and partly conceals the chin. All that is real and essential in traits of character seems caught in this portrayal [16].

The Emperor wears the *stemma*, a circlet of ductile gold encrusted with transparent yellowish enamel and studded with large round pearls in two rows [17]. At the front, in glass, is represented, we may suppose, a large beryl, perhaps flawless enough to be an emerald, cut in a rectangle, and above this is a cross, composed of four pear-shaped pearls, with a large central pearl flanked on either side by a pear-shaped pearl. The *prependulia* hanging from the crown are strings of pearls ending in three pear-shaped pearls and three pearl drops. A dolomite of a subdued white [18], never polished, with a natural texture of the peculiar orient of a pearl is employed by the mosaicist throughout for this ornament.

Deep ultramarine outlines the nimbus.

Constantine is vested in *chiton*, *divitission* or *sticharion-basilikon* and *loros*; the *chiton* appears only in the collar and the cuff, woven in gold and ornamented. The *divitission* is of reddish-violet silk, with metallic threads of gold dividing the tissue into squares by diagonal rows of crosses, each square containing a gold rectangle [19]. A medallion, apparently also woven in the tissue, ornaments the upper part of the sleeve. The ground is of gold, carrying a green stone, very much like a beryl, held by gold claws; its border of deepest violet is studded with pearls. The shoulder-piece is of heavier silk, likewise embellished with semi-precious stones.

Over the *divitission* the Emperor wears a jewelled *loros*, differing in shape and decoration from that worn by Constantine and Justinian in the Vestibule panel. The broad band of this *loros* has an opening through which the head passes; the front piece hangs full length of the body; and behind, the *loros*

descends from the neck, appears under the right arm, passes aslant across the body, is caught up over the left arm, revealing its soft, grey-green lining and falls to a point a little above the knee. Throughout, the *loros* is of the same red-violet and has, like the shoulder-piece, similar lavish ornamentations in even larger stones.

Vestments are worked in glass, except that stone is used for pearls and the centre of red gems. Mosaic representations of precious and semi-precious stones and pastes may admit of many differences in attribution, for in Byzantine art jewels are never placed in identification but rather in their affective force to be worn mingled with all else in shapely response to the order of ceremony. Use of mother-of-pearl is a provincial vulgarity and does not appear anywhere in the mosaics of Haghia Sophia.

The purse held by the Emperor is reproduced in two tones, like tawny raw silk, and tied round the neck with a red cord sealed with a *molybdeboulon* or lead seal. His hands seem to feel the weight of the gold.

Above the head of the Emperor are four lines:

ΚΩΝΣΤΑΝΤΙΝΟΣ ΕΝ ΧΩ Ω ΘΩ
 ΑΥΤΟΚΡΑΤΩΡ ΠΙΣΤΟΣ
 ΒΑΣΙΛΕΥΣ ΡΩΜΑΙΩΝ.
 Ο ΜΟΝΟΜΑΧ

Κωνσταντῖνος ἐν Χ(ριστ)ῷ τῷ Θ(ε)ῷ αὐτοκράτωρ πιστὸς βασιλεὺς Ῥωμαίων. ὁ Μονομάχ(ος). *Constantine, in Christ the God, Autocrat, faithful King of the Romans, Monomachos.*

THE EMPRESS

On the left of Christ, turning slightly towards Him, stands the Empress Zoe. Her head, as is true of all the other heads in this panel, was not in the original work but is a substitution, of later date, in place of an earlier head of the same person. The Empress is shorter than the Emperor; the top of her crown is barely higher than the left shoulder of Christ. She holds a scroll of parchment enumerating imperial donations to the Great Church [20]; an inscription in red, apparently written in the cinnabar used for the imperial signature, runs across the document [21].

Zoe has a plump, roseate face, a slightly heavy nose, full brow, and large yellow-grey eyes, recalling some of the features of her Macedonian forebears [22]. Her rosebud painted mouth is small, with delicate lips, and the fleshy chin is accented with a semi-circular cleft. Her hair, seen below the crown, is fair [23].

The marble selected for her face is different in tone from that chosen for Christ and for Constantine. The complexion of Constantine is rugged and sanguinary. The visage of Christ seems transfused with supernatural light. In Zoe's face the tessellae suggest the enamel which she seems to have used in life; the cheeks are highly rouged, the shadows of the brows intensified and the left eye elongated in much the manner of modern make-up; she is made up doll-like, in her persistent pursuit of youth. Here actually in realistic portraiture is the doting, still popular old Empress, described in life by Psellos, without a single wrinkle in her face in spite of her nearly seventy years.

The Empress wears a crown composed of two jewelled gold bands, widening upwards and heightened by triangular ornaments all suggesting the gates and crenellated walls of a city. This crown may be identified as a *modiolos* [24]. Each band is studded with large rectangular gems in gold setting, alternating with rows of pearls on transparent violet enamel ground. The three gems in the lower band appear to be a beryl in the centre and two garnets or carnelians. In the upper band, the stones seem alternately beryls and garnets. The three triangles are of gold, each with two violet enamel stripes, a garnet or carnelian in the centre. Pear-shaped bits of glass of the translucency of emeralds are set vertically on the side of each triangle.

From the lower edge of the crown on either side hang *prependulia*. They are composed of violet enamel on gold with alternating rectangular beryls and garnets separated by pearls in affective combination. The *prependulia* end characteristically with three large pear-shaped pearls visible only on the left. The ear-ring of the Empress is a circle of small pearls.

In full court attire Zoe appears clad in *chiton*, *divitission*, *loros*, and shoulder-piece. The *chiton* is visible under the *divitission* in the gold collar, ornamented with red enamel, carnelians and pearls, and under the left sleeve appears in a richly woven wristlet. The *divitission* is of reddish-violet silk interwoven in fine gold thread with arrow- and V-shaped motives. Circular ornaments woven in a deeper reddish-violet, bordered with gold, studded with pearls and centred with a square stone like a carnelian on gold ground, decorate the upper arms. The broad close-fitting shoulder-piece, divided in three bands, is edged at the top as usual in violet, and is outlined in gold, with square beryls or cloudy emeralds in gold claw-setting and pearls; the wider central band is enriched, above, by narrow rectangular beryls, alternating with pearls on a gold ground, and below by pearls with square beryls and what appear to be carnelians.

From beneath the shoulder-piece the sumptuous *loros* hangs down over the *divitission*. Heaviest gold tissue forms the centre, with round beryls near the

Andronikos I Comnenos substituted his own image for the effigies of his immediate predecessors [28].

Zoe was married three times. Her first husband was Romanos III Argyros (1028–34); the second was Michael IV the Paphlagonian (1034–41); and after the short reign of her adopted son, Michael V Kalaphates (1041–2), she married Constantine IX Monomachos (1042–55).

Although the head now seen in the mosaic is that of Constantine, the rest



Fig. 1.

of the figure was intended to portray either Romanos or Michael. The former of these two emperors seems to be the more probable, for the seven letters of the name Romanos when preceded by the initial cross better fit the area of the inscription than do the six letters of the name of Michael [29] (see Fig. 1). Furthermore, the image of an unpopular sovereign—as Romanos Argyros was [30]—is more likely to have been sacrificed than that of Michael IV who was beloved by the people and the empress and who died in the fullness of his popularity [31]. This suggests that the original mosaic was executed between 1028 and 1034 and that Romanos III was the first to be represented on it [32].

It remains now to establish the reason for the substitution of Constantine's head and the date on which the substitution was made. Two hypotheses are to be considered. It may be supposed that Zoe marrying for the third time determined to efface the portrait of Romanos and immortalize the features of Constantine in his stead. Then in her new vein she would have commanded, it may be thought, a more pleasing portrait of herself. This explanation has the merit of being simple, but it cannot be supported by any precise historical data or by any similar example.

The alternative supposition may, on the contrary, be upheld by certain facts. On the 18th of April 1042 the nephew and successor of Michael IV, Michael V,

who had attained the throne through Zoe's devotion, banished his adoptive mother to the Island of Prinkipo (Büyük-Ada). On the next day sentence of exile was proclaimed. What followed is well known: a popular revolt supported by Norman mercenaries; the proclamation of Zoe and her sister Theodora as co-empresses; the resistance, flight, and death of Michael; and, finally, two months later, the marriage of Zoe with Constantine Monomachos [33].

The alteration in this mosaic may be considered in the light of these events. We may presume that it was Michael V who, after Zoe's departure from the city, destroyed the effigy of the fallen empress. The portrait of Romanos III would then have been replaced by that of Constantine after mid-June 1042, when Zoe, reinstated and once again married, restored her own portrait. If this is true, the decisive event which determined the alterations in the mosaic took place in the course of the last days of Michael V's reign.

It seems hardly possible that the image of the empress should have been disfigured during the riots that followed the proclamation of her exile. To be sure Michael and his partisans hated her violently, and judging by what we know of sacrileges committed by them [34], we can presume that the sanctity of the place would not have restrained them from destroying her likeness, but from the very outset of the struggle, the Great Church was probably occupied by the supporters of the exiled empress [35]. Thus, the figure could have been mutilated only between the 18th and the 20th of April, that is between the dethronement of Zoe and the first disturbances which followed this event two days later [36]. In this case, Michael's action would not have been that of a man taking vengeance on the image of an enemy in a moment of anger. Indeed, the destruction of Zoe's portrait would rather have been done deliberately and with an air of legality. Such an attitude on the part of Michael is the more probable in that in all his actions against the empress he showed himself—and for an obvious reason—exceptionally circumspect in regard to the Law. The sentence of exile, to become effective, was approved by the Senate [37], and afterwards publicly proclaimed by an official [38]. Seldom had the Byzantine usurpers surrounded themselves with such scrupulous procedure.

It is precisely in the strict adherence to legal procedure that confirmation of this alternative explanation may be found. The charge against Zoe was that she intended to poison the emperor [39]; therefore she was indicted for high treason. This crime was pronounced by the *Lex Iulia Majestatis* to be equivalent to sacrilege καθοσίωσις, ἱεροσυλία = *impietas* [40] and was regarded as an attempt on the safety of the State (*perduellio*) [41]. The offenders were punished by death [42], or if, as in the case of Zoe, they belonged to the

imperial family [43], by *deportatio ad insulam* [44]. Additional penalties were privation of the right of sepulchre and *damnatio memoriae* [45].

In his Institutes, Justinian explains that *damnatio memoriae* involved confiscation of all property and annulment of legacies and donations [46]. But this was only a collateral effect of the penalty. Everything that might recall the personality of the culprit must disappear. In the *Constitutio* against Eutropius, dated A.D. 399, the Emperor Arcadius ordered that commemoration of the disgraced consul be abolished, and that all representations of him be destroyed [47]. This decree, promulgated for a special case, was introduced into the Code of Theodosius, thus receiving the force of law. Even before its promulgation, its practical application was widespread: a great many votive or commemorative inscriptions of all epochs have come down to us, in which names have been hammered out [48]. Hitherto, however, only a large number of texts has been the source of information on the destruction of images [49]. This is due to the fact that the whole figure was commonly demolished. But sometimes it sufficed to suppress only the head. Thus, after the defeat of Maximinus, rival of Constantine the Great, some of his representations were entirely obliterated, while in others only the face was daubed with black paint [50]. We may suppose that in the same way the image of Zoc was only partly destroyed and presents a reminiscence of the operation of an old Roman and Byzantine law in a *coup d'état* at the Court of the Basileis of the eleventh century.

But neither of the two historical interpretations suggested explains the supersession of one head of Christ by another. To us, no satisfactory explanation of this change is forthcoming, unless it is tentatively assumed that the artist drawing new portraits of Zoe and Constantine supplanted the head of Christ with a new creation in the interests of the unity of his painting [51].

This explanation may be supported by the fact that the cubes in the faces are relatively larger than those in the hands and even those in the vestments, proving that the original mosaic heads were of a finer workmanship.





HEAD OF ALEXIOS COMNENOS

CHAPTER II

THE JOHN AND ALEXIOS PANEL

THE John and Irene Panel presents three full-length figures standing. In the centre is the Mother of God holding the Divine Child, on Her right the Emperor John II Comnenos (1118–43), and on Her left the Empress Irene, daughter of Saint Ladislav of Hungary and herself a saint in the Eastern calendar [52]. In contrast to the Zoe Panel, attention seems here to have been divided almost equally among three major figures. Indeed, the Emperor and his wife assume the greater importance. Their heads are larger than the head of the central figure and only by the slightest gesture in making their offering is a unity established between them and the Mother of God that tends to bring the three figures into a single composition.

When complete, the height of the mosaic was 2.47 m. The width of the panel, from the window which bounds it on the right to the pilaster, is 2.76 m. Originally it filled the space between two fillets which framed it above and below; now a strip of gold background 5 to 5.5 cm. in width, just under the upper fillet, as well as all the lower part of the mosaic, to the height of 1 m. from the lower fillet, no longer remain. On the left of the panel, a vertical band of gold background, 13 cm. wide, which extended to the embrasure of the window, has also disappeared. The surface of the gold background of this panel is somewhat smoother than that of the Zoe Panel. In consequence light is not quite so luminously scattered, but the interstices between the cubes are assertive and prevent the face of the panel from becoming anything like burnished gold or a blank metallic plane.

MOTHER OF GOD

The figure of the *Theotokos* is slightly higher in the picture than the figure of the Emperor and of the Empress. It may be supposed that she stood on a low footstool. She holds in front of Her the Christ Child represented in a seated position.

Her nimbus is gold with outline of sealing-wax-red, and on either side of Her head, in large letters made of black-violet glass tessellae, are the usual monograms: $\tilde{M}P' \Theta \tilde{Y}$ $M(\eta\tau\eta)\rho \Theta(\epsilon\omicron)\tilde{\upsilon}$, *Mother of God*.

Her countenance is treated as for an icon. The features are sharply drawn

with wide, heavy brows, long straight nose, thin, firm-set lips, and blue eyes looking forward in soft serenity. Marble cubes of deep rose-red suffused with shining white are set closely, interstices scarcely visible, with a conscious assurance that every change from cube to cube will add to the general incorporeal radiance.

In contrast to the representation of flesh and blood attained in the portraits of the imperial family, this is a devout religious image, which fondly expresses its creator's understanding of the relation of the Virgin to mankind [53].

The head and the upper part of the body of the Mother of God are wrapped in a *maphorion* of white-violet blue, giving the semblance of wool, with crosses woven in gold thread for the forehead and shoulders. Gold edging frames the face in an unbroken line and hangs almost vertically from the forearms. The end of the mantle, thrown over the left shoulder, is fringed with gold crosses. The cap, covered by the *maphorion*, is lightest in hue of the vestments, and the *chiton*, with tight-fitting sleeves, is of the same material and colour. These garments are not of the fathomless blue found in the figures of the vestibule where the structure and setting of the glass result in indescribable vibration. The impression is of applied colour rather than of colour attained by the breaking of surfaces.

Her hands are relatively small. Around the left thumb is twisted a handkerchief of the appearance of raw silk with a light tendril-green stripe on the sides and fringe.

THE HOLY CHILD

The Child Jesus has a round chubby face, with large prominent forehead and full chin. Grave black-violet eyes stare from dark hollows. Darkest auburn hair at the back of the head falls in short curls below the ears. Three tiny locks lie in the centre of the brow. With a tender sense of colour, cubes are set in close precision as in the face of the Virgin. Only the pale-pink tones of the stone here are softer, the range more restricted and the contrast less severe as in the actual fresher flesh of a child.

Christ is dressed in a *chiton* and *himation* of tissue of gold, its high lights breaking into crests of silver-green. He gives the Orthodox blessing and holds a parchment scroll of the Gospels. His head is surrounded by a cruciform nimbus outlined in a pale silver-green: silvery limbs of the cross, in gold ground, set off the head in strong relief against stretches of blue.

Here we do not find the simple, pervading, childlike character of the young Christ in the Vestibule panel, but a somewhat hypostatized being superposed

on infancy in an effort, perhaps, to evoke a more dogmatic image of ageless divinity.

Upwards from the ragged line of the mosaics at the level of the knee the figure of the Mother of God is well preserved. Her face and hands are but inconsiderably scarred by the loss of cubes; more seriously damaged by time is the Child's face, but happily His hands and feet have fared better.

THE EMPEROR

The emperor holding the bag of gold is vested in full ceremonial robes incrustated in jewels; he is drawn like all these figures with firmest contours, his head imperceptibly turned towards the Mother of God. The face is much damaged by time; many cubes had fallen but the fresco painting on the setting-bed, from which we painstakingly removed the plaster, together with the remaining mosaics completely preserve his features. A study of this head in its shattered state of fresco and mosaic again reveals, as in the figure of Zoe, the technical procedure of the artist. In his fresco painting the artist was able to clarify and integrate his perception, and to prepare for the subtle and baffling organization of his cubes. His individual perception and the symbolism of his subject merge in the final achievement [54].

John has a broad, full, swarthy face, prominent lower jaw, and a slightly protruding chin, a deeply care-lined forehead, brown eyes with dark arched eye-brows, a firm mouth, and tightly closed lips. His long, thin, wavy moustache is carefully brushed to the sides of a parting and his semicircular well-kept beard is still thick on the lower side of the chin but is growing grey and is thinning towards the cheeks and below the mouth. The moustache and beard are of a lighter tone than the hair. Long dark locks frame the face and hang to the level of the chin. His complexion is slightly florid although the artist depicts a certain heaviness in an ageing face. John stands here august, serious, and in deep gravity—a soldier and a statesman, looking every inch the man in whom his father Alexios placed unalterable confidence as his successor [55].

The emperor wears the *kamilaukion* [56], a conical helmet-shaped crown of gold, divided with reddish-violet lines of enamel and studded with pearls. Two frontal jewels are surmounted by an equal-limbed cross of pear-shaped stones fixed with their pointed end to the round pearl which forms the centre. The vertical limbs of the cross have the light of rubies, the horizontal, the gold blue of lapis-lazuli.

The *divitission* of the usual imperial reddish-violet silk with floral designs

woven in gold [57], is close fitting; the sleeves, adorned with armlets and cuffs, are loose at the shoulder and tight at the wrist; armlets are inlaid with pearls and jewels, the shoulder-piece slopes to the chest beneath the *loros*.

Much like those worn by Constantine IX, three-quarters of a century earlier, the shoulder-piece and *loros* are woven in gold thread and violet silk, bedecked with pearls and with carnelians, beryls and lapis-lazuli, mounted in squares and rectangles whose edges flash with sprays of pearls. The *loros*, attached to the collar, falls to the waist where it is covered by the part from behind, which is drawn close across the body and is caught up to hang over the wrist. The lining of the *loros*, woven in a white silk pattern on a cinnabar-red ground, showing a dentellated circle with a row of short oblique strokes, is visible below the hand [58].

The head of John is framed by an inscription in lambent red [59]. It begins above the head, continues at his left, and finishes at the right. The inscription of John reads:

ἸΩ	ΕΝ	ΧΩ	ΤΩ	ΘΩ	ΠΙΣΤΟΣ	ΒΑ
Κ	ΑΥΤ					ΣΙΑΕΥ
ΚΡΑ						ΠΟΡ
ΩΡ						ΦΥΡΟ
ΡΩΜΑΙ						ΓΕΝΝΗ
Ο	ΚΟΜΝΗ					ΤΟ
ΝΟ						

Ἰω(άννης) ἐν Χ(ριστῷ) τῷ Θ(ε)ῷ πιστὸς βασιλεὺς (*sic*) πορφυρογέννητος καὶ αὐτοκράτωρ Ῥωμαίων) ὁ Κομνηνός, *John in Christ the God, faithful King born in the purple and Autocrat of Romans, the Comnenos.*

THE EMPRESS

The stiff jewel-robed figure of the empress is represented holding in her long and slender hands a scroll of parchment known to record donations [60]. Her foreign birth is betrayed by her broad face, wide forehead, and long cold grey eyes. She is pictured in strong contrast to the dark colouring of the emperor. Pallor representing the white powder and pale rouge in her make-up renders her face almost devoid of shadows: mask-like, without a blemish. In the fashion of the time, her eyebrows are shaved or plucked and are drawn here with cubes imitating the colour of walnut juice and honey. Black eyebrows with

blond hair were much admired in Irene's time, and the royal coiffeur for this occasion, in acknowledged conformity to taste, elaborated a head-dress for the empress, perhaps by adding to her own hair long heavy blond tresses [61]. Her sidelong glance is directed hesitatingly towards the central figure, her lips are pursed, her expression constrained.

The raiment of the empress is like that of other imperial personages, whose representations in Byzantine art make possible the reconstruction and description of the here partly vanished mosaics. Over a tunic of which only the high jewelled collar is seen, Irene wears the long imperial *divitission* of heavy flaming red silk into which is woven with gold thread a profusion of curves, spirals, and flowering scrolls. Their designs are found in earlier Fatimide and pre-Fatimide weavings and stucco, and later in the rich figured silks of Bursa (Brusa) and Uskûdar (Scutari) [62]. In the hundred years denoted by the art of these panels, the taste of the imperial weavers shows no predilection for motives of birds or animals. Wherever in the Near East the origin of the bifurcation of the ivy leaf is sought, the ambient union of these particular forms here creates a new synthesis and reveals a secondary nature from a fresh intuition in the artists of Constantinople in the time of the genius of the Comnenoi [63].

The long wide opening of the right sleeve is bordered by a running design in blue and gold thickly set with pearls, and the same ornament is repeated on the arm-bands. Partly hidden by the *loros*, the shoulder-piece is woven in blue floriated design on gold ground, bordered with a double row of pearls, interspersed with gems and trimmed on its edge with sprays of pearls. Around the neck the opening has a string of pearls between rows of small garnets or carnelians. Like the shoulder-piece the *loros* is of heavy cloth of gold woven with floriated scroll pattern in deep sapphire-blue terminating in jewels and is similarly bordered; it ends over the forearm in a lengthwise fold, leaving only half of the scroll pattern visible.

The girdle [64] is woven in deep sea-green with an oval buckle composed of a carbuncle set in pearls. Below the girdle the shield-shaped lower part of the *loros* is ornamented with a heart-like design in deep blue enhanced by jewelled flowers on a gold ground. The centre is a beryl.

The empress wears a gold *modiolos* greatly surpassing all the other crowns in magnitude. It has the usual semblance of battlemented walls and gates, shining translucently with the lustre of jewels: beryls, carnelians, carbuncles, lapis-lazuli, and with rows of pearls tier upon tier, until sparkling particles on invisible wires appear actually to fly upwards around the cross that surmounts the crown.

Beneath the crown a diaphanous red flame-like veil, thrown back over the

head, is visible about the hair on both sides and in its pearl-trimmed edges above the shoulders.

The ear-rings are pear-shaped carnelians or carbuncles in gold setting with three pearl pendants much like the Roman *crotalia*.

Silver-green rims the nimbus of Irene.

The head of Irene, like that of John, is framed by an inscription in the same red. It begins above the head, continues at her right, and finishes at the left. The inscription of Irene reads:

ΕΙΡΗΝΗ	
ΕΥ	ΑΥ
ΣΕ	ΓΕ
ΒΕ	ΣΤ
ΘΑΤΗ	Α

Ειρήνη ἡ εὐσεβεστάτη αὐγούστα, *Irene the most pious Augusta.*

ALEXIOS

The transition from the gold surface of the main wall, on which the John Panel is set, to the side of the pilaster with the portrait of Alexios, is effected by a slight rounding of the corner. The mosaic is preserved on Alexios' right side to a point a little below his waist and, on the left, to a little below his shoulders.

The treatment of the figure of Alexios [65] is freer and more forceful than that of the other figures, as if done at one sitting, straight from the artist's soul in realization of vision. There is a great feeling for the power of fundamental colours which set at varying angles to the light produce an endless variety of tones. The modelling of the face is in greens and reds and yellowish greys with dashes of whitish cubes that recall the manner of Van Gogh. The hair is darkest lustrous brown, the large sad eyes are hazel with dark lashes and thick eyebrows, the nose thin and straight with delicate wings, the mouth small and sensitive with grieved drooping corners [66]. A slight swelling is noticeable in the upper part of the face: the boy looks nephritic. It is a troubled, transient face. And this impression is intensified by the nimbus and the robes, where gold leaf is laid over translucent pale green glass, enveloping the figure in changeable greenish lights deepening the gloom. This portrait even more than the others painted in ultra-photographic Roman-portrait vision seems yet to recognize the ordinance in Semitic religions against representation.

The crown worn by Alexios is like the one worn by the emperor his father, only the top is a little less pointed and its ornamentation is in different gems.

The upper stone in front has the glow of the ruby, the lower, the pallor of light sapphire. In both crowns the cross is of pearls, with a gold centre, and the *prependulia* are alike, save in the form of the crosses at the ends.

Alexios is vested in a *divitission* of the same material and pattern-weaving as that worn by the *Autocrator*. Of this we see but a part of the right shoulder and the outline of the right sleeve, and the entire left shoulder and a narrow strip along the *loros*. The ornament adorning the sleeve is a plaque of heavy gold tissue crossed by red squares on which pearls are applied and in the centre of which are stones of the hues of amethyst and beryl. From the open end of the right sleeve projects the tight gold wristlet of the *chiton* adorned with a stone of beryl and two pearls. Pearls encrust the high gold collar of the *chiton*.

The shoulder-piece and the *loros* are also similar to those worn by his father. Throughout, the execution of these vestments is more rapid and free than in the figure of the emperor.

Alexios' hand is small and slender with a narrow wrist. He holds a sceptre, pressed close to his chest. The jewel-topped staff of the gold sceptre casts its red shadow: a succession of carbuncles, emeralds, and amethysts, separated at intervals by pearls, is tipped with a pearl cross.

Near the lower margin of the existing mosaic there is a fragment of design difficult to identify: it consists of a red triangle with three pear-shaped pearls mounted in gold, disposed fan-like from a round central pearl. Beneath the base of the triangle is a line of tessellae of fine red brick, the use of which here is unique in these panels. This fragment we venture to think represents the end of a case containing the scroll [67] held by Alexios in his left hand.

The red inscription around Alexios, like the one which frames the head of his father, runs first above his head, then to his left, and continues down the right on the John panel at Irene's side; it reads thus:

ἈΛΕΞΙ ΕΝ ΧΩ	
Ο	ΠΙ
ΠΟΡ	ΒΑCΙ
ΦΥΡΟ	ΛΕ
ΓΕΝ	ΡΩ
ΝΗ	ΜΑ
ΤΟ	

Ἀλεξιο(ς) ἐν Χ(ριστ)ῷ πι(στὸς) βασιλε(ὺς) Ῥωμα(ίων) ὁ Πορφυρογέννητος, *Alexios in Christ, faithful King of Romans, the born in the purple.*

It is to be noted that αὐτοκράτωρ is withheld from the titles of the 'Second' Emperor [68].

CHRONOLOGY OF JOHN PANEL

No trace of juncture is visible in the mosaic background or is to be detected in the setting-bed between the figures of Alexios and the other personages of the panel. Yet marked differences in the mosaic painting may be noted. The figure of Alexios is not set on the same level as the other figures, the gold tessellae filling his nimbus, as was said, are of a greenish hue, whereas the other nimbi are of yellow gold. The green outline of the nimbus of Alexios is also of a different hue from the green outline of the nimbus of Irene. The jewels on his vestments are not in claw-setting, and in this respect differ from the setting of the jewels on John's garments, and finally, as again it has been noted, there is a remarkable difference in the handling of the figure of Alexios and of the other imperial figures.

Thus it seems probable that the John and Alexios mosaics are the work of different years but, we think, of the same unknown hand; the figures on the wall were executed, we conjecture, in the autumn of 1118, to commemorate John's accession, and the figure on the pilaster was added in 1122, when Alexios, in his seventeenth year, was proclaimed co-emperor. Indeed, Alexios here looks like a youth of this age [69].

CHAPTER III

LETTERING, POSITION OF PANELS, ICONOGRAPHY

THE dates of the inscriptions are set, within narrow limits, by the events. The writing on the Zoe Panel is formal and architectural: the lines balance the figures and heighten their force. Freer and less easily disengaged from the figures are the John and Alexios titles. They seem to have been conceived as emanations from the personages they surround.

THE POSITION OF THE PANELS

The place assigned to the imperial panels—far from the entrance, in the Eastern part of the South Gallery, is exceptional [70]. But the placing of the figures of emperors and founders in or near the Sanctuary is not without analogy in a number of churches [71]. Their position is perhaps not without a liturgical significance in that the persons represented were commemorated in the prayers of the Holy Services [72], and they themselves often took their place beside their dramatic counterparts [73].

This explanation holds good for the position of the mosaics in Haghia Sophia.

Originally the Galleries of the Great Church were designed for the assemblage of women [74]. Later the South Gallery served a more specific and official purpose. From the ninth century on councils were certainly held here [75]. The mosaic representation of the Church, in the hands of the figure of Justinian in the Vestibule [76], reveals the fact that the Patriarchal Palace and consequently the *metatorion*, or private liturgical imperial apartment [77] on the second floor, which it contained, were connected with this part of the Church. Here, in the South Gallery, is also a marble-paved ramp, obviously for imperial use, leading from the South-West Vestibule, and further, built into the thickness of the buttress, is a small and exquisitely domed chapel for the use of two or three imperial personages. The Book of Ceremonies vividly describes the emperor praying in this Gallery with lighted candle in hand [78] and passing through it when returning to the Palace [79].

Thus these imperial portraits form an appropriate decoration for a part of the Church which was the scene of private imperial ceremony.

ICONOGRAPHY

The iconographical significance of both the Zoe and John Panels is identical. Each represents an 'imperial offering' [80], in composition similar to that of the panel of the South-West Vestibule which has been discussed in a preceding Report. Only instead of the model of the City and of the Church, presented by the Founder of the City and the Builder of the Church, here the figures hold the purse and the scroll. Into the John Panel was brought the figure of young Alexios in a revival of an ancient custom for an emperor to portray himself with his heir apparent [81].

The symbolism of such a picture is revealed by an epigram of Theodore Prodromos, referring to a painting in which John II Comnenos is represented. In the verses the emperor worships Christ, the God, and brings to Him 'A tribute of gold and silver', such as his subjects render to himself. The offering is made in thanksgiving and in the hope of new favours to come [82]. These successive offerings spoken of by the poet give us a Byzantine conception of the Christian World in which individual life was of small moment compared with the unified effort of society.

A panegyrist of the twelfth century, Eustathios of Thessaloniki, paraphrasing a verse from the Psalms (xlvi. 5), tells us that the greatness of the emperors is evident from the fact that God is in the midst of them as their guide and prototype [83]. Imperial portraits like these in Haghia Sophia, in which Christ or the Mother of God is the central figure, present pictorially this idea [84].

The image of Christ on the Zoe Panel is characteristic of the art at the end of the eleventh century and throughout the twelfth. A similar treatment of details is found in many monuments of this period—the closed book [85], the throne without back [86], the rounded footstool [87]. The figure is sharply drawn, the scrutiny of the oblique gaze is accented by the uplifted eyebrow. Although some of these traits already appear in the ninth century in a miniature of Cosmas Indicopleustes in the Vatican [88], this image of Christ is in definite contrast to the more solemn type with the calm, benignant gaze 'of the large eyes that see all things from above' [89], fostered, until this moment, in Christian art [90]. Representations closely related to that of the Zoe Panel begin to appear only from the end of the eleventh century, and during the twelfth century, at Torcello; in St. Mark's on the soffit of an arch leading from the southern apse to the sanctuary; at Mount Athos; in the Decesis of the tympanum at Vatopedi, and more generally in Sicily in the dome of the Martorana and at Monreale in the scene of the coronation of King William.

A survival of this type looms unexpectedly much later on the Russian icons

of the Novgorod School [91]. There, however, Christ is never represented full length; the treatment of the beard is essentially Russian, but the piercing gaze directed aslant and the raised eyebrows are preserved. Moreover, the icon bears the significant title—‘the Saviour of the angry eye’.

Yet this is but a reminiscence. Christ of the Zoe Panel, while representing a typical variant of the iconography of the eleventh to twelfth centuries, is chronologically at the beginning of the series. Most surviving examples, as we have seen, are distributed on the periphery of the empire, but the creation of this image must be in this way attributed to Constantinople.

Now the figure of the Virgin with the Child in the John Panel is of a much earlier type. Various representations—designated sometimes by the title Kyriotissa—spring probably from a venerated icon in the Church of ΘΕΟΤΟΚΟΥ ΤΑ ΚΥΡΟΥ, founded during the reign of Theodosius II by the Prefect of Constantinople Kyros Constantine [92]. The earliest example known to us emerges from the sixth century on a lead seal of Mauricios Tiberios [93]. In the twelfth century the type appears on the coinage of Manuel I Comnenos [94], and the image of the Kyriotissa is found in paintings from the eighth century on to post-Byzantine times [95].

It is possible that the popularity of this icon was due largely to a fervent imperial devotion. On a seal of the seventh century four emperors—probably Constantios II with his sons—are represented, as on the John Panel, around a Virgin of the Kyriotissa type [96]. It has lately been suggested that, until the time of the Isaurian Dynasty, this icon was considered a palladium of the Byzantine emperors [97]. If this be true, the discovery of the mosaic in Haghia Sophia tends to prove that it was held as an object of the same veneration as late as the time of the Comneni.

In the faces of the Virgin and Child new elements are discernible which the artists of the twelfth century imparted to the interpretation of an ancient theme. The aquiline nose and heavy eyebrows of the Virgin are characteristic of Oriental types introduced into the art of this period. The drawing of the Child lacks the freshness and spontaneity of the tenth-century Christ in the South-West Vestibule. He is here characterized by a round head, fleshy nose, heavy jaw. A Christ Child of this type appears in the next reign on the coins of Manuel I Comnenos [98] and in contemporary paintings [99], and further, under the name of Emmanuel, this image obtained a wide popularity which it has held to the present day in religious art of the Orthodox Eastern Church [100].

The *Panaghia* and the Child of the John Panel and the Christ in the Zoe Panel are characterized by an iconic rigidity resulting from a sustained repetition of forms.

The figures of John and Irene, and to a lesser degree the imperial portraits of the Zoe Panel, reflect this same conventionalism.

Far different is the face of Alexios. Although a contemporary composition it is painted in an intensity of vision which entrains the stimulus of the identification of spirit and establishes a conduit by which a tide of sentiment is caused to flow to us [101].

Such in part is an account of the rediscovery of these mosaics and a record of the first reflections produced by a study of them.

In the enclosure of Haghia Sophia is revealed a gallery of imperial portraits and religious paintings uniting palaces with the Great Church.

The Zoe Panel is one of the last works of the Macedonian Dynasty, the panel of John and Alexios is among the earlier works of the Comnenoi. On the same wall is represented the art of the end of one epoch and that of the beginning of the next.

Our knowledge of both Byzantine art and history is enriched by these paintings, for they are the abstract and brief chronicles of the time.

In concluding this Report indebtedness for help received from a large number of persons is enthusiastically acknowledged.

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NOTES

1. A curious mention, almost contemporary with the mosaics, is given by the pilgrim Anthony of Novgorod: 'on the Galleries (of Haghia Sophia) are represented all the patriarchs and all the emperors who have been in Constantinople, even those who were heretics' (*Kniga Palommik. Skazanie mest svjatykh vo Caregradě Antonija archiepiskopa Novgorodskago v 1200 g.*, ed. Chr. Loparev, *Pravoslavnyj Palestinskij Sbornik*, xvii. 3, p. 23). During his journey Clavijo also saw the mosaics 'on the walls and the vaults' of the Galleries, and he praises their workmanship (*Embassy to Tamerlan, 1403-1406*, transl. by G. Lestrangle, p. 75). In Turkish times the travellers mention only the mosaics of the vaults of the Gallery which represented religious subjects (see, e.g., P. Gyllius, *De Topographia Constantinopoleos*, ii. 4, Lyon, 1562, p. 76; Comte de Laborde, *Documents inédits ou peu connus sur l'histoire et les antiquités d'Athènes*, Paris, 1854, p. 125, &c.), from which it may be concluded that the imperial portraits remained hidden from the Conquest until the restorations of 1847-9. Fresh descriptions then appear: Patriarch Constantios, Συγγράμματα ἐλάσσονα, Constantinople, 1848, p. 404; [A. N. Murav'ev], *Pis'ma s Vostoka* St. Petersburg, 1851, i, p. 24 (an inexact list); G. and G. Fossati, *Rilievi storico-artistici sulla Architettura Bizantina . . .*, Milan, 1890, pp. 12 and 30. Indications given by these authors have served as sources for more recent works, see E. M. Antoniadès, Ἐκφράσις τῆς Ἀγίας Σοφίας, Athens, 1909, iii, p. 21; A. Grabar, *L'Empereur dans l'Art byzantin*, Publ. de la Faculté des Lettres de l'Université de Strasbourg, fasc. 75, Paris, 1936, pp. 107-8.

2. On the areas of conserving plaster where mosaics no longer exist, no colours are introduced: the white surfaces are touched only with cobweb, an 'heir of time'.

3. See G. A. C. Holt, A casting Method for reproducing Mosaics (*Technical Studies in the Field of the Fine Arts*, vii. 4, 1939, pp. 179 ff.).

4. Cf. other representations of the same sovereigns: enamels of the Budapest crown (11th cent., M. Bárány-Oberschall, *The Crown of the Emperor Constantine Monomachos*, Budapest, 1937); Miniatures of the Manuscripts of Sinai Library, No. 364 (11th cent., V. Benešević, *Monumenta Sinaitica archaeologica et palaeographica*, Petropoli, 1925, i, Pl. 30), of Escorial 5-3 n-2 (14th cent., Photographs of the École des Hautes Études in Paris, Nos. 1221, 1234, 1255, &c.), and of Modena, Estensis S. 5.5 (14th-15th cents., Sp. Lampros, Λεύκωμα τῶν Βυζαντινῶν αὐτοκρατόρων, Athens, 1930, Pl. 58); a little icon in the Benaki Museum at Athens, glass case 26, No. 8 (17th-18th cents.). Most of these pictures present but little iconographic interest, as the features of personages represented there are fictitious. The same observation may be made of the effigies on coins of Constantine IX which reproduce a type which was first used on Byzantine coinage of the reign of Constantine VIII and which remained in use until the reign of Michael VI (see W. Wroth, *Catalogue of Imperial Byzantine Coins*, London, 1908, ii, Pls. LVII. 9 to LIX. 3). Descriptions of lost portraits of Monomachos by John Mauropous, Bishop of Euchaites (Migne, P.G., t. 120, col. 1172) and by an anonymous poet of the 11th cent. (Sp. Lampros, Ὁ Μαρκεσιανὸς Κῶδιξ 524, in *Νέος Ἑλληνισμὸς*, viii, 1911, p. 6). A portrait of Zoe with her first husband Romanos III at the entrance of the Convent of St. Mary Peribleptos at Constantinople, burnt in 1782, is also mentioned by Clavijo (*Embassy*, p. 64).

5. 'When Signor Fossati, the architect employed to repair the Mosque of St. Sophia, had removed the plaster placed by the Turkish conquerors over the unrivalled mosaics which adorned the dome and the walls of that glorious edifice, the Sultan Abdul Medjid visited these marvellous remains of Byzantine art. After contemplating for a while, with evident emotion, the colossal but solemn forms of the Virgin and of the Greek Emperors, he turned to Signor Fossati and said: "It is against the precepts of our religion that such things should remain exposed on the walls of a place of worship; cover up the pictures carefully so that the plaster may be removed at any future period without injury to them, for God only knows the future, and He alone can tell for whom the building may be reserved." The commands of Abdul Medjid were punctually obeyed.' (M. A. Ubicini, *Letters on Turkey*, transl. from the French by Lady Easthope, London, 1856, t. ii, pp. 1-2. See also *Quarterly Review*, March 1854, p. 552.

Cf. Fossati, op. cit., pp. 40 and 46, and F. W. Hasluck, *Letters on Religion and Folklore*, London, 1926, p. 53.)

6. The modern restoration falsifications of mosaics throughout Southern and Eastern Europe have lost this understanding of the gold background in the inattention.

7. On the basis of textiles preserved in the museums N. Toll made a table of fifteen hues of purple going from light violet, almost blue, to dark brown (*Koptskija Tkani*, Prague, 1928, Pl. XI).

8. Cf. Gerstle Mack, *Paul Cézanne*, London, s.d., p. 380.

9. Mr. F. A. Bannister of the Department of Mineralogy in the British Museum suggests the likeness to a fine flesh-coloured marble called 'Rosa Carnagione' which comes from Montagne Grise near Kleber, Oran province, Algeria.

10. Book covers similarly decorated with ivy-leaves (κισσοφύλλα) appear already in the paintings of Saqqara (J. E. Quibell, *Excavations at Saqqara, 1907-8*, Cairo, 1909, Pl. VIII and frontispiece). The motive becomes characteristic in the art of the 11th-12th cents. (Bárány-Oberschall, op. cit., pp. 62 ff. Cf. N. Kondakov, *Istorija i pamjatniki vizantijskoj emali*, St. Petersburg, 1892, Pls. 5 and 7, and *Sobranie M. Botkina*, St. Petersburg, 1911, Pls. 60, 61, 64, &c.).

11. Cf. *First Preliminary Report*, p. 17 and Pl. XIII.

12. Cf. *Second Preliminary Report*, p. 15 and Pl. VI.

13. See examples of similar works in S. Bertaux, *L'Art dans l'Italie Méridionale*, i, Paris, 1904, pp. 496 ff.

14. A. Lucas, *Ancient Egyptian Materials*, London, 1932, 2nd ed., *passim*.

15. For bags of this kind serving especially for gifts which the emperors used to make to churches, see I. Reiske, *Commentarii ad Const. Porphyrogenitum De Cerimoniis Aulae Byzantinae*, Bonn, pp. 122 and 487 ff., and D. Běljaev, *Byzantina*, ii, St. Petersburg, 1893, pp. 157 ff. The contents of the *apokombion* varied from 3 kg. (10 Byzantine pounds) to 30 kg. (100 Byzantine pounds) of gold. Judging by the dimensions of the bag represented in the mosaic, it is the smallest—and also the most usual—gift.

16. Cf. contemporary descriptions of Constantine IX: Michael Psellos, *Chronographia*, vi. 125-6, ed. É. Renauld, ii, pp. 30-1, and the Panegyric to the Emperor Monomachos, ed. C. Sathas, *Bibliotheca Graeca Medii Aevi*, t. v, pp. 106 and 116; John Mauropous, Verses on the first meeting with the Sovereign, Migne, P.G., t. 120, col. 1164 ff.; Christophoros of Mytilena, On the Emperor Constantine Monomachos, ed. Ed. Kurtz, *Die Gedichte des Christophoros Mytileanos*, Leipzig, 1903, p. 32, No. 54; Zonaras, *Epitomae*, xvii. 20, Bonn, p. 615. All these authors agree in praising the physical beauty of the emperor, their descriptions, however, do not correspond always with the portrait of the mosaic: thus, Psellos and Christophoros of Mytilena insist on the fair colour of Constantine's hair which they compare to sun-rays. Perhaps this is but a rhetorical formula, the comparison of the emperor with the sun being a commonplace of Byzantine literature (see F. Dölger in *Gnomon*, xiv. 4, 1938, p. 209, cf. the use of other rhetorical formulae in the description of Psellos, E. Legrand et C. Sathas, *Les exploits de Digénis Akritas*, Coll. de Monuments pour servir à l'étude de la langue néo-hellénique, Nouvelle Série, t. 6, p. 280, and É. Renauld, *Étude de la langue et du style de Michel Psellos*, Paris, 1920, pp. 511-12).

17. The size of enamel is like that in the *corona ferrea* at Monza: there the enamel is green.

18. It has not yet been possible to locate the dolomite from which this stone comes.

19. Similar rectangles on the mosaic of the Raising of Tabitha in the Capella Palatina of Palermo. The lozenges formed of isolated smaller motives—sometimes of crosses—are met with frequently on tissues from the Late Classical times (see, e.g., O. von Falke, *Kunstgeschichte der Seidenweberei*, Berlin, 1936, figs. 10, 89, &c. H. Peirce and R. Tyler, *L'Art byzantin*, Paris, 1932-4, i. 144b, ii. 193a). The Byzantines came to attribute a religious significance to this decoration, which originally was purely ornamental; see an Ἐκφρασις τῶν Ζυλοκονταριῶν of the 12th cent.: 'the gold ornament of the peplos of the emperor (Manuel II?) formed a cruciform design, so that all the parts of the body should be crucified with Christ in accordance with the word of the great Apostle' (Sp. Lampros, Νέος Ἑλληνομνήμων, v, 1908, p. 17). Cf. the representation of the Crucifixion and of the Passion on the vestments described by St. Nicephoros (J. B. Pitra, *Spicilegium Solesmense* . . . , iv, p. 371) and Asterios of Amasia (Migne, P.G., t. 40, col. 166).

20. Cf. the inscription PRIVILEGIA on the scroll which Constantine IV Pogonatos hands to the Bishop Reparatus on the mosaic of S. Apollinare in Classe.

21. Mr. K. C. Whittall tells me that cinnabar has been found by him in two mines showing very ancient workings: one at Sisme, about 30 kilometres north-west of Konia, and the other at Karaburun, at the head of the Gulf of Izmir (Smyrna).

22. Cf. the portrait of Basil II in the Psalter of the Marciana Library, No. 17, with plum face and heavy nose (Lampros, *Λεύκωμα*, Pl. 56), and the description of the same emperor by Psellos: 'his face assumed the form of a perfect circle' (*Chronographia*, i, 35, ed. Renauld, i, p. 22).

23. Cf. the descriptions of Zoe by Psellos, *Chronographia*, vi, 6, and 158 (ed. Renauld, i, p. 120, and ii, p. 49) and Letter to the Emperor Monomachos (ed. Sathas, *Bibliotheca*, t. v, p. 360). The empress, 'this ornament of womanhood . . . , was more plump than her sister . . . her eyes were well-shaped under a large brow, her nose was aquiline but without exaggeration of the curvature, she had blond hair. . . '. Finally, 'in spite of her more than seventy years, her face had not a single wrinkle'. At the moment of the execution of the mosaic, Zoe was probably 68 years old (see below).

24. For this crown—a reminiscence of the *corona muralis*—see Du Cange, *Glossarium ad scriptores mediae et infimae graecitatis*, s.v. *μοδιόλος*, and Reiske, *op. cit.*, pp. 427–8. As in the miniatures of the 10th cent. of the Menologion of Basil II (Lampros, *Λεύκωμα*, Pls. 43 and 45), the *modiolo*s is here relatively low and has only a small number of rays at its upper border. The crown of Irene on the neighbouring panel shows a later development of this ornament.

25. The technique of mosaic painting throughout Hagia Sophia is the same. Brick was rendered with a coat of plaster keyed by indentation with a small trowel to receive a plaster floating of about the same texture and thickness as the rendering. On this second bed, and never, as is often erroneously stated, on the first rough rendering, the mosaic painter drew with an indigo-blue pigment the broad outlines of his composition. Then on the second or intermediate bed was laid in sections only large enough to be used for setting the cubes before the plaster dried, a third bed somewhat thinner than the two preceding beds and of a finer mixture. On each successive section of this third bed was painted the unfolding design of the mosaic, complete in every detail of form and colour, so that when all was done, had no mosaics followed, the result would have been a finished painting in true fresco. Material for further and more detailed discussion of technical matters, relating to the mosaics in Hagia Sophia, is being systematically assembled, and will be presented later in a special Report. In the meantime see also our *Second Report*, p. 10.

26. This part of the *loros* has been frequently confused by scholars with another vestment, the *thorakion*. The correct identification was first made by Běljaev, *Byzantina*, ii, p. 302; cf. also G. de Jerphanion, *La Voix des Monuments*, ii, Paris, 1938, pp. 263 ff., who compares it with the 'corselet' worn by the virgins of S. Apollinare Nuovo. On the shape of the real *thorakion*—a kind of tunic made in two pieces—see Běljaev, *ibid.*, p. 198 (add to the quoted examples the 'patched *thorakion*' of the Egyptian nun Hilaria: H. Winlock and W. Crum, *The Monastery of Epiphanius at Thebes*, New York, 1926, i, p. 150). For the decoration of the pseudo-*thorakion*, usually consisting of a Patriarchal cross, but sometimes also—as in our case—of a simple cross, see examples gathered by G. de Jerphanion, *op. cit.*

27. J. Capart, 'L'usurpation des monuments dans l'Antiquité Égyptienne' (*Mélanges de Philologie Orientale*, publ. à l'occasion du X-me anniversaire de l'Institut Supérieur d'Histoire et Littérature Orientales de l'Université de Liège, 1932, pp. 57 ff.), W. Deonna, *Statua* (*Dictionnaire des Antiquités Grecques et Romaines* de Daremberg, iv, 2, p. 1483).

28. Nicetas Choniates, *Historia*, Bonn, p. 433.

29. The entire space to be filled is 46 cm. long. Seven letters occupy about 44.5 cm., six letters only 39.7. A calculation of this kind is not possible for the scroll where the characters are more irregular.

30. Psellos, *Chronographia*, ed. Renauld, pp. 44 and 55. Arisdagès of Lasdiverd, *Histoire*, trad. E. Prudhomme, Paris, 1864, viii, p. 47.

31. Psellos, *Chronographia*, pp. 56 and 84. B. Wassiliewsky et V. Jernstedt, *Cecaumeni Strategicon*, Petropoli, 1896, pp. 77, 97, and 98.

32. The presence of several cubes of the original inscription preserved in front of the name of Constantine excludes the hypothesis that the mosaic underwent two successive restorations and that the portrait of Romanos had been replaced by that of Michael IV before being finally transformed. In order to avoid all misunderstanding, let us also note that we cannot admit Zoe Carbonepsina with

her son Constantine VII (913–19) as the personages of our mosaic, the style of which is not of the beginning of the 10th cent.

33. See G. Schlumberger, *L'Épopée Byzantine*, iii, Paris, 1905, pp. 342 ff., and E. de Muralt, *Essai de Chronographie Byzantine*, i, St. Petersburg, 1855, pp. 621–3.

34. Michael V as plunderer and profaner of churches, see Michael Attaliotes, *Historia*, Bonn, p. 15.

35. Matthew of Edessa indicates that during the riot of 1042 battles took place even in the interior of Hagia Sophia (*Chronique*, i, lxiii, trad. E. Dulaurier, Paris, 1863, p. 73, cf. Arisdagès of Lasdiverd, op. cit., ix, p. 54). But according to the Greek historians, who are better informed, the Church was occupied from the very beginning of the riot by the partisans of Zoe: references in Muralt, op. cit., p. 622, and Psellos, *Chronographia*, pp. 108–9.

36. Two days later, according to Psellos (*Chronographia*, i, p. 102). According to other historians, the riot broke out immediately after the proclamation of the act of Zoe's dethronement. As Psellos was an eyewitness and indeed a participant in all these events, he should be the more trusted.

37. Psellos, *Chronographia*, i, p. 100.

38. On the Forum Constantini (Michael Glycas, *Annales*, iv, Bonn, p. 591). The proclamation of the sentence was made by the eparch, Alexios the Patrician (Cedrenus, *Historiarum Compendium*, ii, Bonn, p. 537).

39. Psellos, *Chronographia*, i, p. 98.

40. *Digesta*, XLVIII. iv. 1; cf. Th. Mommsen, *Abriss des römischen Staatsrechts*, p. 540. The Byzantine jurists repeat the same stipulation: *Basilica*, XL. xxxvi. 1, and *Synopsis Basilicorum*, E', xxxiii. 1.

41. *Institutes*, iv. 18. 3.

42. *Ibid.*

43. An inequality of penalties corresponding to the status of the culprit was admissible according to Byzantine law. Persons of humble birth were punished more severely than were those of the noble class: see, e.g., murderers: *Basilica*, LX. xxxix. 4, and the *Nomocanon* of Photius, ix. 26. For a similar discrimination in Rome: Mommsen, op. cit., pp. 1031 ff.

44. *Digesta*, XLVIII. iv. 1. On the progressively increased severity of the penalty for *lèse-majesté*, see Mommsen, op. cit., p. 532.

45. *Institutes*, iv. 18. 3; *Basilica*, LX. xxxvi, and LX. lxix. 1.

46. *Institutes*, iii. 1. 5.

47. *Codex Theodosianus*, ix. 17.

48. J. Cagnat, *Cours d'Épigraphie Latine*, 4th ed., pp. 169 ff. A Byzantine example (Justinian II): A. Schneider, 'Die πύλη τοῦ Καλαγρού der Landmauer von Konstantinopel', *Byzantinische Zeitschrift*, xxxviii, 1938, p. 408. In case the persons whose memory had previously been condemned were rehabilitated, the erased name was again engraved in the inscription (e.g. several inscriptions of Commodus). If our hypothesis is correct, Zoe's head presents an example of restoration of this kind.

49. Collected by Mommsen, op. cit., p. 990. Add—for Byzantium—*Chronicon Paschale*, Bonn, p. 701 (Phocas's portraits burnt), and instances quoted lower.

50. Eusebios, *Historia Ecclesiastica*, ix. 11 (English translation by C. Crusé, p. 371). The latter procedure was quicker and perhaps also more humiliating. Cf. numerous Byzantine saints and Gothic statues from which the heads were broken by the Moslems and by the revolutionaries of 1789. Usually, as with the portrait of Zoe, the names were preserved. Andronicos Comnenos—who was more subtle—not only usurped the portraits of his predecessors, but in one case, that of the Regent Xenia, who was young and pretty, he ordered the modification of the effigy in such a way that she should appear as an old woman (Nicetas Choniates, *Historia*, Bonn, p. 433).

51. The difference in style between the heads and the draperies did not disturb them. It is known that the Russian icon painters divided their work, some making the faces, others the rest of the picture (D. Rovinskij, *Obozrénie ikonopisanija v Rossii do konca XVIII veka*, St. Petersburg, 1903, p. 50). The same thing happened in Byzantium. In the scene of the Last Judgement in Torcello, for instance, the draperies of the group of Apostles to the right are treated in a very different way from those of the group to the left, but the heads are everywhere by the same hand. Thus it is evident that in Torcello there were at least three different artists: two working on the vestments; a third, on the heads.

52. There exist no other portraits of Irene: her supposed image on the Pala d'Oro of Venice represents in reality the wife of Alexios I (J. Ebersolt, *Les Arts somptuaires de Byzance*, Paris, 1923, p. 94). For the portraits of John II, see Lampros, *Λεύκωμα*, Pls. 67, 71, and especially 68 (contemporary miniature of Cod. Urbin. 2 of the Vatican). A probable representation of John II still as a child in the Barberini Psalter Gr. 372 (11th cent., Lampros, *ibid.*, Pl. 97; cf. Jerphanion, *op. cit.*, pp. 270-1). Effigies on coins (reproducing as for Constantine IX the more ancient types): Wroth, *op. cit.*, ii, Pls. LXVI-LXVIII. Records of disappeared portraits: E. Miller, *Manuelis Philae Carmina*, Paris, 1855, pp. 354-5, and Sp. Lampros in *Νέος Ἑλληνομνημίων*, viii, 1911, pp. 127-8, 148-50, 173.

53. Cf. George Santayana, *The Realm of Truth*, London, 1937, *passim*.

54. 'I have finished a picture when I no longer need the model—the model is in me, the object is absorbed, subject and object are one. I then express myself.' Conversation with Monsieur Henri Matisse, Nice, 1937.

55. Cf. the contemporary descriptions of John II by Anna Comnena (*Alexiad.*, vi. 8, Bonn, p. 298, John still child) and Guillaume de Tyr (*Historiarum rerum in partibus transmarinis gestarum. Recueil des Historiens des Croisades, Hist. Occ.*, i, p. 655). It appears from these texts that John was a man rather small, black, and ugly. One would rather compare the mosaic—where these physical defects are evidently mitigated—with the official descriptions of the emperor, e.g. with his 'epitaphs' (Theodore Prodromos, Migne, *P.G.*, t. 133, col. 1302 ff. and 1405 ff., John Geometer, Migne, *P.G.*, t. 106, col. 903 ff.).

56. Cf. Ebersolt, *op. cit.*, pp. 96-8, and Du Cange, *Dissertation XXIV sur l'Histoire de St. Louis* (after the edition of Joinville), Paris, 1668, p. 251.

57. Similar ornaments on the miniature of Urbino 2 and in the Dogmatic Panoply of the Vatican (portraits of Alexios I. F. Chalandon, *Essai sur le règne d'Alexis I Comnène*, Paris, 1900, frontispiece and p. 50). Note especially the elongation of the stems characteristic of the development of floral motives in time of the Comneni.

58. '... Is it from the time you have been robed with purple and bedecked with gold, when you wear gems from foreign mountains and seas, placing them now on your brow, now on your feet, now round your waist, now suspended from your person, now buckled on your garments, now used as a seat? You have certainly in that way been made a variegated and multicoloured vision like the peacocks' (Synesius to the Emperor Arcadius. *De Regno*. 1080, p. 126. Translation by Augustine Fitzgerald, Oxford, 1930).

59. Perhaps an imitation of imperial signature in vermillion, cf. J. Moravcsik, *The Holy Crown of Hungary*, p. 4 (reprint from *The Hungarian Quarterly*, iv, 1938).

60. For this empress of Hungarian origin see J. Moravcsik, *Die Tochter Ladislaus des Heiligen und das Pantocrator-Kloster in Konstantinopel* (reprint from *Mitteilungen des Ungarischen Wissenschaftlichen Instituts in Konstantinopel*, 7-8, 1923), with quotation of Byzantine texts praising her beauty (καὶ συχνῶς κάλλει ψυχῆς ὁμοῦ καὶ σώματος διαλάμπουσα).

61. Similar artificial tresses worn by Byzantine women are mentioned by Nicetas Choniates, *Historia*, Bonn, p. 786. On the general use of wigs in Byzantium see E. Molinier, 'La Coiffure des femmes dans quelques monuments byzantins' (*Études d'Histoire du Moyen Age, dédiées à G. Monod*, Paris, 1896, pp. 61 ff.). In the case of Irene one has to bear in mind, however, her Western birth. It is known, indeed, that at this time Western women used to wear tresses which there is no reason to suppose were artificial.

62. Ashar, Hakim, A.D. 1003: Giyshi, 1085, Cairo. Conversations with Professor Alan J. B. Wace.

63. Cf. other examples of similar representations of tissue: above note 56 and N. Kondakov, *Izobraženija russkoj knjažeskoj sem'i v miniatjurach XI v.*, St. Petersburg, 1906, Pl. VI, and O. v. Falke, *op. cit.*, fig. 215.

64. The girdle as the sign of aristocracy: cf. *Book of Ceremonies*, Bonn, pp. 257, 10; 612, 12. Cedrenus, *Historiarum Compendium*, Bonn, ii, p. 103, 15; quoted by A. Vogt, 'Histoire des Institutions. Note sur la Patricienne à la ceinture', *Échos d'Orient*, Nos. 191-2, juillet-décembre 1938.

65. For this prince who died before his father and of whom there remain no descriptions nor any other portraits except those of our mosaic and of the Urbino 2, see F. Chalandon, *Jean II Comnène et Manuel Comnène*, Paris, 1912, pp. 11 ff.

66. One finds a certain likeness to his Hungarian grandfather, whose portrait is in the Remetca Church, Transylvania, Rumania: J. Stefanescu, *L'art byzantin et l'art lombard en Transylvanie*, Paris, 1938, Pl. I, fig. 1.

67. Ἀκακία, which was sometimes also represented as a small bag filled with gold or with earth (Běljaev, op. cit., pp. 217–18).

68. This omission is due to the fact that Alexios was only a co-emperor (see lastly, after the remarkable works of Bury, Dölger, and Stein on this matter, G. Ostrogorsky, 'Autocrator Johannes II and Basileus Alexios', in the *Annales de l'Institut Kondakov*, x, 1938, pp. 179 ff.).

69. We reject the hypothesis, which may also be considered, that both parts of the panel were executed simultaneously but by two different artists.

70. The only certain similar example: imperial portraits in the Galleries of the Cathedral in Kutais (N. Kondakov, *Opis' pamjatnikov . . . Gruzii*, St. Petersburg, 1890, p. 5). According to Kondakov, a portrait of Basil I may have existed in the Galleries of the Nea (*Vizantijskija cerkvi i pamjatniki Konstantinopolja*, Odessa, 1887, p. 163; cf. *Book of Ceremonies*, ed. A. Vogt, i. 28 and 29, pp. 109 and 112). See also the frescoes of the staircase leading to the Galleries of St. Sophia in Kiev, where there were also imperial representations. But these were in all probability not real portraits (cf. Grabar, op. cit., pp. 71 ff.). On the usual placing of portraits in the Western part of the church, see e.g. S. Radojčić, *Portreti srpskih vladara u Srednjem Veku*, Skoplje, 1934, pp. 50–1, and N. Okunev, 'Portrety korolej-ktitorov v Serbskoj cerkovnoj živopisi', *Byzantinoslavica*, ii. 1, 1930, pp. 79 ff.

71. Examples gathered by M. Karger in *Recueil Uspenskij*, ii. 1, p. 143. Add G. de Jerphanion, *Les Églises rupestres de Cappadoce*, Paris, 1925–34, Pls. 98, 1; 139, 2; 143, 2 (a remarkable portrait of Nicephorus Phocas with his family in the prothesis of the 'Great Dove-cot' at Tchauch-In).

72. F. Brightman, *Liturgies Eastern and Western*, Oxford, 1896, pp. 363 and 373.

73. At Cefalù, behind the enclosure of the sanctuary, two places are reserved: to the North—'Sedes Regia', to the South—'Sedes Episcopalis'. Cf. Travellings of T. Korobejnikov: 'in the cathedral church of Jassy . . . the seat of the voivode . . . is on the right behind the choir' (*Pravoslavnyj Palestinskij Sbornik*, ix. 3, fasc. 27, p. 78), and canon 69 of the Trullo Council authorizing the emperors to enter the sanctuary (J. Hefele-H. Leclercq, *Histoire des Conciles*, iii. 1, Paris, 1909, p. 54).

74. Paulus Silentarius, *Descriptio Sanctae Sophiae*, vv. 586–9, Bonn, p. 29, cf. Du Cange, *Constantinopolis Christiana*, Paris, p. 33, and Antoniadès, op. cit., ii, pp. 257–8 (this author supposes that the Galleries may also have been for catechumens).

75. Nicetas-David Paphlagonian, *Vita Ignatii*, Migne, P.G., t. 105, col. 544 (ἐν τοῖς δεξιοῖς μέρεσι τῶν κατηχομενέων). Cf. Du Cange, op. cit., iii, p. 34, and Hefele-Leclercq, op. cit., iv. 1, p. 486. *Book of Ceremonies*, ii. 14, Bonn, p. 564 (election of a patriarch, without any indication as to which side of the Galleries). Similar evidence for the 14th cent.: A. Paspatis, *Βυζαντινὰ Μελέται*, Constantinople, 1877, p. 339. They used to say at this epoch: ἐν τοῖς καλλίοις τοῦ πατριάρχου τοῖς ἐν τοῖς δεξιοῖς κατηχομενεῖοι (F. Miklosich and J. Müller, *Acta et Diplomata Graeca Medii Aevi*, Vienna, 1860 ff.: i, pp. 538, 540–1; ii, pp. 2, 4, 98. Cf. Antoniadès, op. cit., ii, p. 232). These 'patriarchal cells' should be located not at the far end of the South Gallery, which was more particularly reserved for the emperors (see below)—but in one of the central bays, where Salzenberg saw the representation of the Pentecost, the same representation being in that part of the Church of Holy Apostles where also Councils were held (Simeon of Thessaloniki, *De Sacris Ordinationibus*, Migne, P.G., t. 155, col. 437, cf. N. Skabalanovič, *Vizantijskoe Gosudarstvo i Cerkov' v XI v.*, St. Petersburg, 1884, p. 365).

76. Mosaic representation in the South-West Vestibule of Haghia Sophia, *Second Preliminary Report*, Pl. XVII.

77. Běljaev, op. cit., ii, pp. 139–41; J. Ebersolt, *Sainte-Sophie de Constantinople*, Paris, 1910, p. 25.

78. *Book of Ceremonies*, i. 31 and 37, ed. Vogt, i, pp. 116 and 145.

79. *Ibid.*, ii. 10, Bonn, p. 548.

80. On this subject see Grabar, op. cit., pp. 106 ff.

81. Cf. *ibid.*, pp. 26–30.

82. E. Miller, *Manuelis Philae Carmina*, Paris, 1857, ii, pp. 354–5.

83. W. Regel, *Fontes Rerum Byzantinorum*, Petropoli, 1857, i. 1, p. 87.

84. This composition is also found in Byzantium on wedding rings, where Christ and the Mother of God are represented blessing the husband and wife (M. Rosenberg, *Geschichte der Goldschmiedekunst auf technischen Grundlagen*, Niello. Frankfurt a/M., 1924, pp. 47 ff.). This may be derived from classical art (cf. the *Juno Pronuba* between the two fiancés) but account must also be taken of the similarity existing between the imperial coronation (στέψις) and the Orthodox marriage (στεφάνωμα), during which the bridegroom and the bride also receive crowns.

85. Prothesis of Torcello, Capella Palatina (*Traditio Legis* and the dome), domes of St. Sophia of Kiev, of the Martorana, and of Mirož. Miniatures of the Exultet Rolls of Bari (1), Fondi, John Rylands Library, &c.

86. Probably σελλίον, as opposed to the more solemn θρόνος (cf. a *scholium* of the *Book of Ceremonies*, Bonn, p. 520). See the monuments quoted in the preceding note, the scene of the coronation of King William at Monreale, and the miniature of Urbino 2. The throne of this form is met with also earlier (e.g. Bawit, chap. xvii; Cappadocia, St. Barbara at Gucurémé, Church of Forty Martyrs, &c.), but it is remarkable that in Byzantine coinage, for instance, it appears only from the reign of Michael VI.

87. See most of examples mentioned in the two notes above. This footstool appears also in the tympanum of Vatopedi. The usual Byzantine type is rectangular.

88. Fol. 89. The glance directed to one side is met with on more ancient monuments of Hellenistic inspiration, e.g. at Santa Maria Maggiore, where, in order to increase the impression of reality, the figures look at each other. The same glance also appears from the 7th cent. on the Byzantine enamels for technical reasons: the pupil and the eye could be thus made with a single cloison. Thus in both cases the similarity with the iconographic type with which we are concerned is fortuitous.

89. *S. Abercii Vita*, ed. Th. Nissen, pp. 121-2. Cf. the possible interpretations of F. Abel in *Byzantion*, iii, 1926, p. 336, and of W. Ramsay, *Cities and Bishoprics of Phrygia*, Oxford, 1897, p. 724—this latter confirmed by the Slavonic version: G. Lüdtke-Th. Nissen, *Abercii titulus sepulchralis*, Leipzig, 1910, p. 11. Cf. a similar Pisidian inscription, W. Calder, in *Anatolian Studies presented to Sir William Ramsay*, Manchester, 1924, p. 76. The classical source of this sentence may be found in Sophocles, *Antigone*, v. 183: Ζεὺς ὁ πάνθ' ὀρώων ἀεί. For the Christ εὐόφθαλμος, see Boissonade, *Anecdota Graeca*, Paris, 1833, t. iii, p. 473, Migne, *P.G.*, t. 95, col. 349, and A. Papadopoulos-Kerameus, *Manuel d'Iconographie Chrétienne*, St. Petersburg, 1911, p. 226.

90. On this type probably of Syro-Antiochian origin, see O. Wulff-M. Alpatov, *Denkmäler der Ikonenmalerei in kunstgeschichtlicher Folge*, Hellerau b. Dresden, 1925, p. 25.

91. N. Kondakov, *Litzevoj Ikonopisnyj Podlunnik*, i, St. Petersburg, 1905, p. 85.

92. G. Schlumberger, *Sigillographie de l'Empire Byzantin*, Paris, 1884, p. 158, and K. Amantos in *Ἑλληνικά*, iii, 1930, p. 539, and ix, 1936, p. 206.

93. N. Lichačev, *Istoričeskoe Značenie Italo-Grēčeskoj Ikonopisi. Izobraženija Bogomateri*, St. Petersburg, 1911, Pl. IV, No. 13; cf. Nos. 14, 15, and 17-21 (later instances).

94. Wroth, op. cit., Pl. LXXI, 6 and 7.

95. N. Kondakov, *Ikonografija Bogomateri*, ii, St. Petersburg, 1915, pp. 140 ff.

96. Lichačev, op. cit., Pl. IV, No. 15 and fig. 143. A. Delattre, *Le Culte de la Sainte Vierge en Afrique*, Paris, 1907, p. 100.

97. N. Lichačev, 'Sceaux de l'empereur Léon III l'Isaurien', *Byzantion*, xi, 1936, p. 475.

98. Wroth, op. cit., Introduction, p. lxxv, and Pl. LXVIII, 15, and later on, on the mints of Alexios III, Pl. LXXIII, 7 and 10.

99. Monreale, top of the Triumph Arch. See also [Mjasocdov], *Freski Spasa Nereditzy*, Leningrad, 1925, Pl. XXI, and A. Muñoz, *Le Miniature delle Omilie di Giacomo Monaco . . .*, Roma, 1910, Pls. 21 (Emmanuel), 61-3 (other children).

100. e.g. A. Nekrasov, *Drevne-russkoe izobrazitel'noe iskusstvo*, Moscow, 1937, Pl. XI. Th. Šmit, *Kahrié-Djami (Izv. Russ. Archeol. Instituta v Konstantinopolě, xi, 1906)*, No. 118. Wulff-Alpatov, op. cit., fig. 58; Kondakov, *Litzevoj . . . Podlunnik*, p. 61.

101. In a general way, as regards the iconography of the emperors, the variety and the individual character of the figures of the mosaics show well enough that these are real portraits. Here one is as near as possible to what St. John Chrysostomos described as 'the original portrait of the imperial face,

πρωτότυπον εἰκόνα, accomplished . . . μετὰ πάσης ἀκριβείας, which presents for succeeding copyists an exact, διακριβωμένην, image' (Migne, *P.G.*, t. 50, col. 589). Cf., later on, the expressions used by the Patriarch Nicephoros when speaking of the imperial portraits: 'similitude, ὁμοιότης, the very exact likeness, ἀκριβεστάτη ἐμφέρεια, &c.' (Migne, *P.G.*, t. 50, col. 589. Texts of the same kind for the portraits of private persons: G. Millet, 'Portraits byzantins', *Revue de l'Art Chrétien*, 1911, pp. 445 ff.; add to Millet's examples of marriages with an exchange of portraits: Patriarch Nicephoros, *Historia*, Bonn, p. 18). Thus the theory appears to be inexact, according to which the Byzantine emperor 'n'existe guère en tant que thème de l'art portraitique' (Grabar, *op. cit.*, pp. 8 ff.; cf. W. de Gröncisen, *Le Portrait, tradition hellénique et influences orientales*, Rome, 1911, pp. 79 ff. For criticism of this theory see G. Millet, *op. cit.*). Some exceptions are only possible in the case of portraits of princesses, as is evident, e.g. from the recently uncovered representations of the wife and of the daughters of the Grand-Duke Jaroslav at St. Sophia of Kiev (1037-67), which are obviously idealized. But if in the 'original portraits' of emperors of which St. John Chrysostomos speaks there was an element of idealization, it was rather in the expression and in the majestic attitude of the personages than in the features (see above, Note 54, and cf. the distinction which the Byzantines made between the physical, human nature of the emperor and the divine dignity of his power: e.g. Anthony Melissa, *Maximes*. (Migne, *P.G.*, t. 136, col. 1012)).

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APPENDIX
PARTICULARS OF COLOURS, MEASUREMENTS, ETC.

■

	Position	Detail	Particulars
II	CHRIST	Head of Christ	<p>larger than those of the fold of the upper lid but continuing its curve. The next line of greyish-rose tessellae continues the curve of the upper eyelid and ends against the wing of the nose. The final line of the rendering of the curve into the cheek is of warm greyish-yellow stone tessellae beginning below the inner corner of the eye and also ending against the wing of the nose.</p> <p>The wing composed of large light rose and small dark rose tessellae is outlined by yellow-olive. The nostril is represented by a single small tessella of blackest violet set in this outline next the red underline of the tip. The high light of the nose, of whitest marble, is the third row of tessellae shading from deep rose inside the red outline which renders the turn of the ridge. These lines of shading also curve under the tip and end above the right nostril. The line of marble tessellae rendering the high light varies from whitish below the bridge, through the narrower tessellae of light rose along the ridge, to its most intense high light at the tip where the tessellae again widen out.</p> <p>The shade of the right side of the nose is shown by a line of greyish-rose tessellae extending from the inner tip of the eyebrow to the single light rose tessella above the nostril; it is followed by a line of warm greyish-yellow which continues into the wing of the nose and ends above the nostril.</p> <p>The outline of the wing is shown by a row of light yellow-olive curving up from the nostril, the tessella for which has been lost.</p> <p><i>Cheeks: Left cheek:</i> inside the light yellow-olive outline of the hair, and of the curves of beard and moustache, and beginning at the deep rose upper line of the forehead prominence, is a row of greyish-rose tessellae which ends at the nostril. Next inside this is a line of warm greyish-yellow tessellae ending against the wing of the nose. It is continued as the last line of shade of the nose described above. A whitish high light curves down in three rows of tessellae from the outer tip of the eyelash. It deepens gradually in two tones of rose towards the outline mentioned above and also into the deeper rose of the cheek-bone. A single row of white marble tessellae, beginning at the inner corner of the eye and curving down to the deep rose line of the cheek-bone under the eye, creates a small high light which is paralleled by a line of faint rose and follows down the rose of the cheek-bone in swerving lines ending at the outline of the beard.</p> <p><i>Right cheek:</i> above the outer tip of the right brow to the joining of the moustache and beard, the cheek is outlined by a line of greyish-rose. From the moustache to the nose the line is warm greyish-yellow. Continuing the curve of the hollow above the eye, but in light greenish-grey stone tessellae, is a single line following inside both the previously mentioned colours. A final parallel line of grey-white, inside, completes the rendering of the turn of the cheek. The high light, which begins at the outer tip of the lash, deepens through four graduated tones of rose to the deepest rose of the cheek. The upper line of rose curves upward to the inner point of the eye. Two outer lines of light rose not connected with the rendering of the cheek-bone curve sharply down from the shade of the nose through a field of grey tessellae between the nose and the tessellae of the cheek-bone. A high light of four narrow whitish tessellae curves around the wing of the nose.</p> <p><i>Moustache:</i> inside the yellow-olive outline of the left side of the moustache are three curving rows of different lengths, varying from the tone of the outline to the more translucent dark reddish-brown glass tessellae of the short inner row. The right side, except the yellow-olive outline,</p>

	Position	Detail	Particulars
	CHRIST	Head of Christ	has one row of dark olive-brown and one row of translucent reddish-brown.
13			<i>The beard</i> is shown in the same tones as the hair but without the use of the stone tessellae. Its lower edge is outlined from ear to ear by a single row of olive-brown glass tessellae. The upper outline is the yellow-olive outline of the face. Between these lines the strands are represented in alternating rows of semi-translucent dark reddish-brown glass tessellae.
14			<i>Mouth:</i> the upper lip shows faint traces of the setting-bed. The upper red of the lip is made with five tessellae in varying reds, continuing on the left with the slender blackest-violet tessellae set vertically next the red. One tessella of blackest violet ends the line on the right. The lower edge of the tessellae in this row forms the curved parting line of the lips. Beneath the red tessellae of the upper lip, the lower one is represented by smaller tessellae of rose marble. The fullness of the lower lip, like the upper lip, has lost its tessellae. From the corner of the mouth on the left side a high light curves down to the inner point of the moustache, within which is a row of light grey tessellae. On the right a corresponding row of the same colour underlines the moustache.
15			<i>Chin:</i> curving down to the outline of the beard from either side of the fullness under the lips is a line of greyish-rose stone tessellae, within which is a line of light olive-yellow, surrounding the part of the chin not obscured by the beard. The curve of this row is underlined by small dark yellow-olive tessellae and a line of greyish-rose which follows down the chin to the beard inside the yellow-olive line. The vertical greyish-rose line is one of four of the same tone alternating with light rose and penetrating the wedge-shaped lines of tessellae of the beard.
16			<i>Neck:</i> the shadow of the beard on His left is rendered in three lines of tessellae varying from the brown-olive outline of the beard to a light grey at the rose of the flesh. The form of the left side of the throat is shown by four lines of tessellae beginning together at the intersection of the hair and the beard and separating as they curve down to be penetrated by lines of rose. The four lines of rose vary from the outermost line to the high light of the Adam's apple of white marble. The rendering of the right side begins with three lines of tessellae varying similarly in tones of greyish yellow-olive, which separate to receive tapering lines of rose. The right side of the throat is lighter in tone than the left. The point of the throat is entirely in deep rose tessellae.
			The shading of the left side of the neck is shown against the blackest-violet outline of the hair by two rows of dark yellow-olive and four lines of rose varying towards the high light beside the throat. One line of grey outlines the right side of the opening in the garment and the flesh is rendered in lines of rose tessellae lightening toward the high light at the curve of the throat.
17			<i>Ears:</i> the left ear is shown by three short curved lines of rose tessellae in three tones. The high light is next the blackest-violet outline of the hair. Between the outline of the hair above and the inner of the three lines of the ear, there are no tessellae, but only the painted surface of the setting-bed.
			<i>The right ear</i> is similarly indicated by three curved rose lines of tessellae with the high light again at the outline, and a narrower area of visible setting-bed.

APPENDIX

	Position	Detail	Particulars
18	CHRIST	Hands of Christ	<p><i>Right hand:</i> length, 0.21 m.; greatest width, 0.09 m. The outline, from upper edge of the cuff around all the fingers and thumb, except the last three tessellae next the cuff below the palm, which are blue, is of dark reddish-brown glass tessellae. Between the outlines of the thumb and the palm and the base of the forefinger is a narrow strip showing intact the blue paint of the setting-bed. The fingers are represented in four lines of small rose marble tessellae shading from deep rose at the inside outline to the light rose at the high light at the back. The first joint of the thumb is strongly marked by two lines of rose tessellae curving from the tip of the thumb to the joint. The shade at the base of the second and third fingers is rendered by a single line of light yellow-olive glass tessellae.</p> <p>The deep rose shade of the rounding of the forefinger passes across the hand, rendering the fullness at the joining of the fingers with the hand, and, inside the joint of the little finger, turns sharply down and renders in semicircular rows the muscular fullness where the outside of the palm meets the wrist. The high light between the forefinger and the second follows parallel to the lines of deep rose and is rendered by gradations of rose, reaching the whitest tone next the shade below the fingers and ending at the side, two rows from the outline, in a loop, at the beginning of the semicircular rows which complete it. The shade at the turning of the hollow of the palm between the thumb and forefinger is shown in two rows of greyish olive-yellow tessellae of varying width, which taper down from a horizontal line of three tessellae, below the deep rose shading, to the curved line of shade over the muscular fullness where the thumb joins the hand.</p> <p>The hollow of the palm is shown in four lines of rose, bounded by high lights on two sides and part of the third, and by the curved line of olive and the yellow-olive shade of the palm on the fourth.</p> <p>Tessellae are missing from the base of the thumb. It is rendered by a high light which narrows as it follows the concentric curves of the wrist, and shades grading to the single line of rose which outlines the high light. One light rose line separates the dark rose from the outlines.</p>
19			<p><i>Left hand:</i> the flesh of the fingers, outlined in dark reddish-brown glass tessellae, is rendered in lines of rose marble tessellae grading to high lights, as in the right hand.</p>
20		Feet of Christ	<p>The contours are in one row of small deep red tessellae. The flesh of the leg is in olive-brown, light rose and whitish tessellae, two rows of each. One row of dark blue, edged with gold, shows a fragment of the sandal stripe.</p>
21		Nimbus of Christ	<p>Diameter, 0.54 m. The circle and the outline of the cross limbs are made of one row of sealing-wax-red tessellae. The intermediate spaces are of gold. The lozenge-shaped ornament in the middle of each limb of the cross is shown in green tessellae of one tone. It is in a gold setting and is framed in dark blue tessellae; the gold setting is omitted in the jewel of the left limb. A round whitish stone outlined in light blue is set opposite each of the four edges of each jewel. Two rows of gold tessellae surround the nimbus outside, and outline the limbs of the cross and the contour of the head of Christ within it. They are slightly larger than the tessellae of the background; their gold is brighter and has a greenish tinge. Where the incision was made for the insertion of the present head of Christ, the gold tessellae are missing.</p>

	Position	Detail	Particulars
22	CHRIST	Monogram	The letters and the omission signs are in large tessellae of blackest violet set slightly higher than the gold background and outlined in it by a single row of gold tessellae. The average height of letter is 0.071 m. The omission sign over IC is 0.15 m. long; that over XC, 0.165 m.
23		Chiton and Himation of Christ	Both vestments are of the same blue, for which six shades of glass tessellae are used. The lighter tones of palest amethyst change in the shaded parts to a deep sapphire-blue. Both vestments have a dark outline; the same colour is used to indicate the design of the folds. The right cuff of the <i>chiton</i> is of gold tessellae with a spiral design and a border of small squares in red. The <i>clavi</i> are also in gold. The shining effect of the gold material is enhanced by slanting and vertical rows of dark olive and light olive tessellae.
24		Gospel Book	Height of front cover, 0.35 m.; breadth, 0.23 m. Height of the back cover, 0.40 m.; breadth, 0.285 m. The ground of the back cover turned towards the onlooker is plain gold outlined by a row of dark blue tessellae. The cross in the middle is of violet glass tessellae; in its centre is a round jewel of rose tessellae in a gold claw setting, with a frame of sealing-wax-red. Each limb of the cross is adorned with six pearls represented by round white stones; similar stones in a light blue setting surround the cross. The double heart-shaped ornaments at the corners of the cover are half-rose with a red border, and half-green with a border of a deeper shade, beginning with green under the middle finger and alternating red, green, red. They are outlined in dark blue. The edges of the front cover are formed by two rows of burnt-sealing-wax-red tessellae enclosing a row of gold. The leaves of the manuscript are shown with rows of whitish stone tessellae, alternating with light greyish-blue ones. A row of burnt-sealing-wax-red tessellae outlines the top right-hand corner of the Gospel. The clasps are shown in two dark blue rows with a gold row between; their loops are made of gold and burnt-sealing-wax-red tessellae.
25		Throne	Width of front, 0.97 m.; height of block of the seat, 0.19 m.; total height of preserved part, 0.55 m. The throne is represented in olive and dark olive tessellae. Slanting rows of gold tessellae appear on the surface. The throne is enriched with coloured ornamental inlays and pearls. The outline is of a single row of dark blue tessellae. The side of the throne at our right is represented by a perspective in which the lines converge to the eye. The surface of the seat is in olive-brown tessellae of two tones. The front and the right side of the seat are edged above and below by a narrow blue band made of four rows of black-blue glass tessellae outlined with gold. On this blue background are set at varying distances from each other, round, unmatched, whitish stones representing pearls. Beside the bands in which the pearls are set, the border design of the seat is composed of two superimposed rows, light olive-brown tessellae above and dark olive-brown below. The space between the blue bands is in light olive-brown with slanting gold strokes. Two rows of gold parallel the blue bands at a short distance. The space between is set with square ornaments: two on the front of the throne are red and one ornament on the side is green. The red ornaments have rose tessellae in the centre, surrounded by sealing-wax-red tessellae. The green stone is also in two tones. Its forward edge is obscured by the face of the seat. Each ornament is framed in dark blue.

	Position	Detail	Particulars
	CHRIST	Throne	<p>The block of the seat overhangs the base which has similar ornamentation with larger jewels. The front is divided into two horizontal rectangular areas by a blue band studded with white stones; the outline of each division is also in dark blue with a gold edging. The marble surface is in dark and light olive-brown tessellae. In the centre of each upper field is a large rectangular ornament of turquoise-blue. The flat face of the ornament is in light blue, the receding planes are in darker tone. Each stone is held in a gold claw setting, and is framed by a single row of dark blue.</p> <p>Only part of the lower section of the throne, on Christ's left, has been preserved. The fragments of remaining mosaic indicate that it was identical with the upper part. The lower field contained a rectangular red ornament, rose in the centre. It has the same gold claw setting as the jewels in the upper field, and is framed in dark blue.</p> <p>The shaded parts of the recess on the side of the throne are shown in dark olive-brown tessellae; the lighted parts are in light olive with gold strokes. The edges of these recesses and the outline of the transversal bar between them are in dark blue, enlivened in some places with gold.</p> <p>Of the base of the throne remain: two horizontal bars of red, with gold tessellae set beside them, and fragments of square ornaments in gold settings are visible in the lower part of the front.</p>
26		Cushion	<p>The material is in three tones of opaque green and blue glass tessellae. The rosettes at the ends of the cushion are in gold and light olive-green with a sealing-wax-red row to indicate the loop.</p>
27		Footstool	<p>The semicircular outline of what was probably a footstool under the feet of Christ, is in red; the background is of gold. The space between the base of the throne and the footstool is filled with greyish-blue and whitish tessellae.</p>
28	CONSTANTINE MONOMACHOS	Dimensions	<p>Height from top of the crown to lower edge of remaining tessellae, 1.58 m.; width at shoulders, 0.47 m.; height of head from lower edge of crown to end of the beard, 0.21 m. A single row of gold outlines the entire figure; it is doubled around the crown and the face.</p>
29		Head	<p>The surface of the face is 0.008 m. lower than the surface of the surrounding gold background. The joining of the inserted head with the rest of the panel follows the rim of the crown, the outline of the hair at each side of the face, and inside the string of pearls, and is completed where the collar is attached to the garment.</p>
30			<p><i>Colours of face:</i> the same palette is used for this face as for that of Christ, but slightly darker in tone. The whitish-grey and the four tones of rose are of stone tessellae; the reddish-brown, olive-yellow, and bluish-grey are glass tessellae.</p>
31			<p><i>Hair:</i> the hair is outlined above by the line of shade under the crown of reddish-brown glass tessellae; at his right, from the edge of the crown to the end of the prependicular, by a row of dark violet and darkest reddish-brown. The inner outline of the hair from the circlet to its meeting with the beard at the cheek-bone is reddish-brown as the shade under the circlet. Of the same colour is the outline of the hair next the gold background on the left; lower on, this contour curves into the outline of the beard. The hair is rendered in alternating rows of yellow-olive and reddish-brown.</p>
32			<p><i>Forehead:</i> under the shade of the edge of the crown is a line of greyish-</p>

	Position	Detail	Particulars
33	CONSTANTINE MONOMACHOS	Head	<p>rose tessellae below which, forming a triangle above the deep rose outline of the frontal prominence, is a short row of greyish-rose intersected by a bent line of light yellowish-grey. The left frontal prominence is rendered by a line of deep rose curving from the bridge of the nose to the outer tip of the brow. The whitest high light above the brow is the third row in the transition from deep rose. The right frontal prominence is rendered similarly except that the three rows below it are in high light.</p> <p><i>Eyes:</i> the eyebrows are made of olive-brown glass tessellae. The tone of the left eyebrow varies and grows heavier above the inner tip by a short wedge-shaped line of dark reddish-brown. The hollow under the left brow is rendered by a single line of greenish-grey ending at the lachrymatory gland. Between the gland and the inner tip of the brow is a line of three tessellae of the same colour. The hollow of the right eye is rendered by a similar line, beginning at the lachrymatory gland and ending at the outer corner of the eye. The fold of the upper eyelids is shown by single lines of burnt-sealing-wax-red; the flesh of each lid is a curving line of rose tessellae grading to a slight high light in the centre. The upper eyelashes of each eye are a curving line of olive-brown tessellae; below the last tessella of their inner tips are lachrymatory glands, shown by rose tessellae. The pupils are represented by single circular glass tessellae of blackest violet. The irises are composed of three curving lines, the first a row of light greyish-blue, the next of olive-yellow, the final of olive-brown tessellae. This outside row is followed by a curved line composed of the whitish stone tessellae forming the high light of the eye. The right side of each eyeball is shown by a triangular piece of white stone. The left side of each eyeball is a small, grey tessella. The shade at the lower edge of the eyeballs is a single curving line of greyish-rose. The lower lashes are in one row of greenish-olive, followed by another line of greyish-rose representing the shade under the eyes. For the left eye this line extends from the lachrymatory gland to the outer corner; for the right it is a short, crescent-shaped line below the shade.</p> <p><i>Nose:</i> the bridge of the nose is shown by a line of rose tessellae between the brows, followed below by one of olive-brown tessellae representing shade. The contour of the left side of the nose and its tip is drawn with one row of burnt-sealing-wax-red tessellae ending at the right nostril, represented by one rectangular and one small, triangular tessella of dark reddish-brown. The shading of the left side of the ridge, continuing the curved line of the shade under the brow, is shown by a line of greyish-rose. A second line of greenish-grey begins at the lachrymatory gland and ends against the last larger tessella of the greyish-rose. Beginning at the sealing-wax-red contour line the ridge is rendered by three parallel lines of rose marble grading from deep rose to highest rose high light. The two lines of rose follow the red contour line as it turns at the tip, and end above the nostril. The shade of the rounding of the ridge back to the cheek is a line of yellow-olive extending from the last tessella of the right brow to the inner tip of the wing. Next is a parallel line of greenish-grey extending from the tip of the brow to the outline of the wing and a third light greyish-yellow line going from the lachrymatory gland to the outline of the wing. The latter is rendered in greenish-grey tessellae surrounding the light rose flesh of the wing.</p> <p><i>Cheeks:</i> <i>Left cheek:</i> under the shade below the left eye is a curving whitish high light extending from the lachrymatory gland to the outer corner of the eye. It also tapers down into the cheek parallel to the greenish-</p>
34			

	Position	Detail	Particulars
35	CONSTANTINE MONOMACHOS	Head	<p>grey line of shade of the nose. Following the line of the moustache are continuations of the greyish-rose and greenish-grey shade of the nose, and a third line of light greyish-yellow. The cheek is outlined against the beard by a line of greyish-rose which ends at the meeting of the beard and moustache. Within these outlines the cheek is shown in tones of deep rose. Its fullness over the cheek-bone is rendered by a curving line of deepest rose beginning within the rose of the flush and turning down towards the outline of the beard.</p> <p><i>Right cheek:</i> the right cheek is outlined against the beard by four rows of tessellae. The first is a short line of greyish-rose opposite the cheek-bone, inside which is a longer line of the same tone extending from a point near the outer corner of the eye to the joining of the curves of the moustache and beard. From the end of the rose line of the prominence of the forehead, a line of greenish-grey follows the curve of the cheek to the meeting of the beard and moustache, turning up along the moustache and ending at the nostril. The fourth line of greyish-yellow begins in the wedge-shaped line between the outer tip of the eyebrow and the shade of the hollow of the eyes and follows the third to the high light surrounding the wing where it then becomes a line in the shade of the nose. A high light beginning at the corner of the eye underlines the curving shade below it as far as the lachrymatory gland. Lines of whitish tessellae starting from the outer corner of the eye, penetrate the rose of the flush. The tone of the latter deepens toward the four curving lines of graded shades of rose in which is rendered the prominence of the cheek-bone against the fainter rose of the cheek. The curves of deepest rose are separated from the inner greyish-yellow outline by small irregular-shaped light rose tessellae which curve up past outlines of the wing and become the uniform rose of the space between the shade of the nose and the flush of the cheek. From the lachrymatory gland to the meeting of the curves of the flush with the high light under the eye, is one line of light greyish-yellow.</p>
36			<p><i>Moustache:</i> the left side of the moustache is shown in four curving rows of glass tessellae. The upper two rows of yellow-olive end against the tip of the nose. Below them is an olive-brown row rising from the beard and also ending at the tip of the nose. Still lower the moustache is completed by the fourth row of dark reddish-brown which reaches the corner of the mouth. The same colours in the same sequence are used in the four rows for the right side of the moustache. Its upper edge is marked by a short curving fifth row in dark olive-brown. The middle part of the moustache which entirely covers the upper lip is formed by two short horizontal rows; the upper one is in olive-brown, the lower in yellow-olive tessellae.</p>
37			<p><i>Mouth:</i> the lower lip is shown by five deep rose tessellae of which the outer two are small and triangular. It is underlined by five tessellae of scaling-wax-red.</p>
38			<p><i>Beard:</i> on the left the beard is outlined against the cheek by a line of yellow-olive, broken at the side of the head by the joining of the later insertion of the face. Between these outlines the beard is shown in irregular lines of yellow-olive, olive-brown, and reddish-brown. On the right the beard has no continued outline and is shown in alternating rows of olive-brown and dark reddish-brown, with the latter in smaller, less regular tessellae. The olive-brown lines of the closely trimmed beard penetrate the lighter tessellae of the flesh of the chin. The greyish-rose lines of the flesh of the chin end against the short reddish-brown rows of the beard.</p>

	Position	Detail	Particulars
	CONSTANTINE MONOMACHOS	Head	<i>Chin:</i> below the burnt-sealing-wax-red tessellae of the lower lip, the chin is shown in greyish-yellow stone tessellae, outlined at the sides by the single olive-brown line of the shade of the moustache. The greyish-yellow tessellae alternate with greyish-rose lines to render flesh under the thinning beard.
39		Hands	<i>Left hand:</i> the fingers of the left hand are outlined in burnt-sealing-wax-red tessellae interrupted at the end of the little finger. Flesh is uniformly rendered in four lines of rose marble tessellae grading from a high light at the upper inner side to rose at the back. At the end of the little finger is one red tessella.
40			<i>Right hand:</i> the greatest length of the right hand is 0.193 m.; greatest breadth, 0.103 m. The fingers are treated similarly to those of the left hand in graded rows of tessellae, except the little finger which is shown by a line of rose and the continuation of the line of the olive-brown shade of the lower edge of the hand. The muscle between the thumb and the first finger is shown by three short curving lines of graded rose tessellae surrounded by a high light. The rounding of the back of the hand is rendered by a gradual transition from the high light at the upper edge to rose next the line of shade.
41		Crown	The mosaic surface is uneven. The ground of the circlet is shown in olive-yellow tessellae. It is outlined above by one row of large irregular tessellae of darkest reddish-brown and at the sides by a row of reddish-brown; on his right only two tessellae of the outline remain. The lower edge of the crown is a row of large, gold tessellae with a greenish cast, produced by the green film of transparent glass under which the gold leaf is fixed. A similar row marks the upper edge below the brown outline. The central jewel, framed in a gold claw setting, is of two tones of green. The centre is of opaque medium green, the edges of light greenish-yellow. The whitish stones representing pearls set on the circlet are single, slightly irregular, round pieces of whitish rock, without outline. The cross, formed of four pear-shaped whitish stones about a central round one, as well as the two similar stones flanking the cross, has a greyish-blue outline. The cross and the two accompanying whitish stones belonging to the original crown are separated from the circlet of the crown by the plaster joining the two surfaces and do not rise on the axis of the central jewel. The first five whitish stones of the prependicularia below the crown have the hair for background and are without blue outlines; all the remaining whitish stones retain the whole or a part of their blue outline, and are of the original prependicularia.
42		Nimbus	The diameter is 0.494 m. The circle is drawn in one row of blackest-violet tessellae surrounded on the outside by a row of gold tessellae selected for their regularity. The background of the nimbus is of rings of gold tessellae concentric with the blue circle.
43		Inscription	Both the original and the subsequent letters vary from 0.068 m. to 0.075 m. in height, and are in tessellae of blackest violet.
44		Chiton	The collar belongs to the existing head: the pearls ornamenting it are of a stone of different structure from the other pearls of the panel; these are of bluish-grey marble, while everywhere else they are of a whitish rock. The pearls are set on an olive background made of tessellae of exactly the same colour as the tessellae used for the hair and moustache.

	Position	Detail	Particulars
	CONSTANTINE MONOMACHOS	Chiton	The cuff of the right under-sleeve has on a gold background, a red tendril pattern terminated by a single red band and a border of continuous red squares at the wrist. The cuff is distinguished from the sleeve of the divitission by a row of bluish-black tessellae which continues along the upper side and makes an edge at the wrist. Between this and the flesh of the hand there is a line of white. The under-edge of the cuff is of reddish-violet.
45		Divitission	<p>The <i>vestment</i> is shown of pale reddish-violet material patterned in gold. The gold designs seem to be woven in the tissue and consist of squares formed by eight small crosses; in the centre of each square is a smaller square set on the diagonals of the larger, and formed of an unbroken line of gold with one gold tessella at the middle of each side on the exterior. At the intersections of lines of small crosses forming squares is a single gold cube.</p> <p>The vestment is outlined by one row of reddish-violet tessellae darker than those of the material. The shaded parts, the outer and lower edges of the sleeve and the folds are of the same tone of reddish-violet. Excepting the whitish stones for pearls and the rose-red centres of jewels, all tessellae used in the vestment are of gold.</p> <p><i>Medallions:</i> the oval gold medallion on the upper part of the sleeve is outlined by a broad band of dark reddish-violet, closely set with whitish stones and with an inner line of the same dark tone. The square jewel in the centre of the gold ground contains a stone in three tones of green deepening towards the edges. The ornament is in a gold claw setting outlined by one row of red tessellae. A whitish stone is set in the gold ground at the centre of each visible side of the jewel.</p>
46			<p><i>Shoulder-piece:</i> the material of this part of the divitission is in dark reddish-violet. It is divided into rectangles by a double row of pearls—whitish round stone tessellae. In each rectangle is set a jewel of corresponding shape. Jewels in two tones of green tessellae alternate with jewels in two tones of blue, in which, in every instance, the lighter tones are in the centre. All of the eight jewels are in gold claw settings; five are surrounded, moreover, by a frame of greyish-yellow tessellae. At the intersections of the rows of pearls are round reddish jewels of two tones in circular claw settings. The centre of each jewel is in rose stone, its outer frame in red glass tessellae.</p>
47		Loros	The material of the loros is of the same dark reddish-violet colour as the shoulder-piece: like the latter it is divided into a rectangular pattern by vertical and horizontal double rows of pearls. Each element of the design of the loros is similar, but, excepting the whitish stones, is larger than the corresponding one in the shoulder-piece, and the gold settings of the stones have two rows of tessellae instead of one. The end of the loros, falling from the left arm, is edged by a single gold line, and is formed by three vertical bands of approximately equal width. The first band from our left is composed of long double rows of pearls on a reddish-violet ground, and has three rectangular red jewels in a claw setting. Where this band turns at the lower corner, it becomes the outer edge of the loros. The second band shows a gold ground on which are alternating rectangular blue and green jewels, not in claw settings, but surrounded by one line of gold tessellae and one of red, and separated from the next ornament by groups of four pearls. The third group of whitish stones below the wrist is exceptionally on a reddish-violet ground. At each end this band, with the outer one, turns

	Position	Detail	Particulars
48	CONSTANTINE MONOMACHOS	Loros	to form the border of the material. The third band is a long, double line of whitish stones on the reddish-violet ground, broken by a single, rectangular jewel in claw setting. The lining of the loros, seen where it is caught up over the arm, is rendered in sage-green glass tessellae with dark olive half-tones for the folds and olive-green high lights.
		Bag	Represented in two tones of light, ivory-white stone tessellae. The lighter tones of the high lights of the folds converge at the neck of the bag and are penetrated below by darker, wedge-shaped shadows. The stuff above the cord is represented in almost equal areas of the two tones as if the bag were lighted from its left. The cord is burnt-sealing-wax-red, with a shadow of one line of greyish, dark reddish-violet tessellae below. The round seal is of greyish-blue with a centre of one darker and more brilliant tessella.
49	ZOE	Dimensions	Height from top of central triangle of crown to the under-side of left hand at lower edge of the conserved mosaic, 0.825 m.; width of shoulders at centre of band above large medallions, 0.42 m.; length of face from lower edge of the crown at centre of forehead to tip of chin, 0.16 m.; height of entire figure from top of crown to lowest edge of remaining setting-bed, 1.43 m.
50		Head	The mosaic surface of the face is not flush with the surrounding surface, but is slightly depressed due to its later insertion. The joining between the inserted face and the surrounding panel follows the under-edge of the crown, the vertical line of the left pendant, the broken upper edge of the collar and the line of the right side of the face and hair. Tessellae of the upper part of the left ear, of the pendant and the left side of the neck and throat are missing.
51			<i>Colours of face:</i> for flesh: four tones of rose, varying from deep to whitish-rose; light and dark olive-brown; sealing-wax-red, grey and whitish for high lights. The outline of the face, beginning above the lobe of the left ear, continuing across the temple and forehead, and following the line of the right cheek almost to the centre of the chin, is formed by a row of black-violet changing into reddish-brown. On the left side the outline is in deep olive.
52			<i>Hair:</i> the little that is visible under the rim of the crown is shown in light and dark olive-brown tessellae disposed in alternating rows between the reddish-brown outline of the forehead and the rim of the crown.
53			<i>Forehead:</i> the left side of the forehead is in ivory-white. The triangular high light over the left eye, near the bridge of the nose, is in milky white. The right side is composed of four shades of rose, deepening with the turn of the forehead.
54			<i>Eyes:</i> each eyebrow is a curved row of olive-brown tessellae. The hollow under the left eyebrow is of two short lines of greyish-rose supported by a longer line of light greyish-olive tessellae. At the outer corner of the left eye, next the line of the fold, is a short tapering line of rose tessellae. The folds of the upper lids are executed in small, burnt-sealing-wax-red tessellae. The left lid is in bright rose grading to a slight high light over the pupil. The right lid is bright rose at the inner corner, greying as it turns away. The eyelashes of both eyes are of the same olive-brown as the brows. The pupils are single, angular, bluish-black tessellae around which the irises are shown in two curved rows of small tessellae: the inner row of light olive-brown, the outer of dark olive. One tessella in the outer row of the iris of the right eye

	Position	Detail	Particulars
	ZOE	Head	<p>where it meets the lid is missing. A single tessella of deepest rose in the inner corners of the eyes marks the lachrymatory glands. The high light on each eyeball at the left of the iris is a triangular piece of the whitest marble. The rounding of the eyeball below and to the right of the iris of the left eye is shown, beginning at the inner corner, in a line of greyish-yellow, broken to the left of the pupil by a single dark tessella, beyond which the line continues to the outer corner in an ash-grey. Between the single darker tessella of the line and the darker outer row of the pupil is a narrow curved tessella of greyish-brown. The shading of the ball of the right eye, beginning at the inner corner, is wider but of the same ash-grey; below the pupil is a darker tessella beyond which the tessellae vary slightly as the line turns away. The under lid of the left eye is a single curved line of greyish-yellow tessellae tapering toward each end. The under-lid of the right eye is a double curving line of slightly greyer tessellae.</p>
55			<p><i>Nose:</i> the shade above the bridge of the nose is represented by two slightly curved lines in olive-green, the lower of which is darker. The contour line from the inner point of the right eyebrow to the left nostril is in sealing-wax-red glass tessellae. The right side of the ridge is shown by one line of varying shades of rose which follows the red outline. The deepest tone is reached three tessellae below the bridge. The left side of the ridge is shown in varying high light, reaching its lightest tones at the tip and under the bridge. Parallel to the high light is the darkest of the four rows of yellow-olive tessellae which show the left side of the nose. The darkest row grades slightly from the bridge of the nose and reaches its greatest intensity at the tip next the lightest tone of the high light. The outline of the wings is in light olive-green. The flesh of the wing is in rose, and the nostril is marked by one darkest blue tessella.</p>
56			<p><i>Cheeks:</i> the high light of the <i>left cheek</i> begins where the line of the upper eyelash extends across the temple and curves downward into the deep rose crescent which forms the flush of the cheek. The flush is composed of five curved rows, varying from deepest near the nose to the high light at the centre. A curved high light two tessellae in width follows the shade of the lower lid from its inner corner to the blush of the cheek. A similar double line surrounds the wing of the nose. The shaded areas are rendered in tones of yellow-olive deepening as the face turns toward the outline. Below the visible part of the ear is an outline of slightly larger dark olive-green glass tessellae which ends in a slender wedge of three tessellae extending into the flush of the chin. Inside this outline a row of olive-green, darker than that of the surrounding shade, of the same larger tessellae, also penetrates the flush of the chin in a similar manner.</p> <p><i>Right cheek:</i> the flush of the right cheek, shown by four lines of rose tessellae, is deepest next the black-violet outline of the face. The four rows extend from the two lines of shade under the lower eyelid to the line of the parting of the lips. At both ends of these lines half-width cubes are employed permitting the two colours to penetrate each other to avoid meeting in an obvious line. The fifth row is a high light of the lightest tone of whitish marble, extending from the lachrymatory gland to the corner of the mouth. Between this row and the outline of the nose is a line of yellow-olive, beginning at the point of the eyebrow and ending at the right corner of the upper lip. This line represents the barely visible shade of the nose on the right cheek.</p>
57			<p><i>Mouth:</i> the dimple of the upper lip is a single olive-brown tessella</p>

	Position	Detail	Particulars
	ZOE	Head	<p>surrounded below and at the sides by a high light of the whitest marble, beyond which on both sides the shade of the lip is of the same yellow-olive as the shade of the cheeks. The upper lip is shown by a row of dark olive-brown tessellae of which two, in the centre, are missing. The left corner of the mouth is shown in four narrow greyish-olive tessellae, of which the inner two are vertical and the outer two, almost triangular, turn slightly upwards. Two larger triangular tessellae compose also the right corner of the mouth, but they are of a warmer tone than those of the left. The lower one continues the line of the parting of the lips. The upper, more pointed tessella lifts the corner of the mouth. The red of the underlip is shown in two curved lines of rose marble tessellae, of which the outer line is the deeper. On the fullness at either side of the lower lip is a high light of the whitest marble, below which as far as the dimple is the same yellow-olive of the shade of the cheeks, in lines of tessellae rendering the form of the under lip.</p>
58			<p><i>Chin:</i> the dimple is a curved tapering line in olive-brown tessellae. It is shaded from below by a single row of greyish-olive tessellae. A high light of whitish tessellae supports the line of shade under the dimple. Four lines of rose marble varying from the white of the high light of the dimple to deep rose at the outline render the turn of the chin. Beyond the olive outline is a row of sealing-wax-red glass tessellae connecting the black-violet of the right cheek outline with the deep olive of the left cheek.</p>
59			<p><i>Ear:</i> only the rim of the lobe remains. It is shown by rose tessellae varying from deep rose downward to a tessella of the whitest marble at the tip. The ear-ring is represented by a circle of small square whitish stone tessellae from which several are missing. The ear-ring lies over a strand of hair represented by three irregular light olive-brown tessellae inside the circle and one beyond it. Within the circle of the ear-ring, several tessellae showing the ear are missing. Only a few dark and light olive-brown tessellae of the hair are preserved above the ear-ring.</p>
60		Hands	<p>Length of the <i>left hand</i>, 0.162 m.; breadth, 0.075 m. The outline of the hands and fingers is drawn in small, dark reddish-violet tessellae, of the same shade as the ground of the loros. The lighted areas of the hands, with the exception of the actual high lights, are shown in the same yellow-olive as the shaded parts of the face. A high light follows the upper outline of the thumb of the left hand from the second joint to a point near the tip where it reaches its highest intensity. The turn of the thumb is rendered in deepening shades of rose which converge to a single line of tessellae where the thumb joins the hand. This darker row continues along the outline of the wrist. A high light surrounds the muscles between the thumb and first finger, which is shown in varying shades of rose. The cords on the back of the hand are faintly indicated. The first three fingers are shown with high lights on their upper sides lightening at the tip. This is the only indication of a nail. The turn of their lower sides is rendered in deepening shades of rose. The shadow of the lower edge of the little finger and hand to the end of the existing tessellae is drawn in a single line of greyish-olive. Beyond this the dark reddish-violet outline of the hand to the cuff is visible in the painting of the setting-bed.</p>
61			<p><i>Right hand:</i> only the tip of the thumb, the backs of the fingers and a small part of the outer edge of the hand are visible. It is rendered in a manner similar to that of the left hand.</p>

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
62	ZOE	Nimbus	0.47 m. in diameter. The circle is drawn in one row of blackest-violet glass tessellae. Inside, the ground of the nimbus is in concentric rows of gold tessellae and outside it is surrounded by a single concentric row. The figure within the nimbus is also outlined by a single row of gold tessellae.
63		Inscription	The letters vary from 0.067 to 0.079 m. and are made of tessellae of the blackest-violet glass.
64		Crown	<p>The high circlet is outlined on either side by a single line of dark reddish-violet tessellae. Its upper and lower outlines, and the line dividing the circlet into two broad bands, are of the blackest violet. The lower narrower gold band is studded with alternating red and green jewels separated by two vertical double lines of four pearls each set in a dark reddish-violet ground. The burnt-sealing-wax-red jewel on her right is the smallest of the three, because seen in perspective, and more nearly square. The central rectangular jewel is composed of opaque green glass in varying tones. The third rectangular jewel is shown in red tessellae which vary in colour and size. These three jewels are set on a gold ground made of a varying number of rows of gold tessellae. The upper broader band is decorated with jewels placed alternately with those of the lower band. The stone on her right, represented in perspective, is formed by two rows of green tessellae. The second upright rectangular jewel is sealing-wax-red. The third jewel in opaque green glass tessellae is nearly square. The last and smallest square stone is in burnt-sealing-wax-red tessellae; all these stones are framed in gold as in the lower section of the circlet. The dark reddish-violet ground separating the jewels is adorned with vertical rows of round stones representing pearls. Above the upper blackest-violet outline is a single row of gold tessellae, over which is a single row of dark reddish-violet.</p> <p>Three similar triangular ornaments are visible above the circlet. The lateral sides of each triangle are formed by a line of gold edged by a double line of reddish-violet. Their lower side is formed by the dark reddish-violet outline of the gold upper edge of the crown. On the reddish-violet outline of each triangle are set vertically green pear-shaped stones, differing in size and shown in varying numbers of tessellae. The stone at the apex of each triangle is of a larger size. In the centre of the gold ground of each triangle is a jewel in sealing-wax-red glass. The gold grounds and red jewels of the triangles differ in size and number of tessellae used.</p> <p>The pendants hanging from the circlet, one on either side of the face, are composed of alternating rectangular red and green jewels in gold settings, separated by groups of two pearls—whitish stones. The jewels and pearls are set on a dark reddish-violet background, which also forms the outer edge of the pendant. Many tessellae are missing from the first three jewels of the left pendant, due to the later insertion of the face. Three whitish stone drops representing pearls and outlined in bluish-violet, hang from the end of this pendant. Of the right pendant, only the green lowest ornament and the pearls separating it from the red one above, are visible. Between the outline of the cheek and that of the pendant, several tessellae were sacrificed in the resetting of the face.</p>
65		Divitission	<p>The entire figure is outlined by a single row of gold tessellae. The black-violet outline of the sleeves from the shoulder-piece to the point near the elbow where it meets the other garments, is broken by the reddish-violet outline of the sleeve ornament.</p> <p>The ground of the material of the garment is of the same reddish-violet</p>

	Position	Detail	Particulars
	ZOE	Divitission	as the divitission of Constantine IX, with an all-over design of short triangular angles and lines in gold tessellae. The round medallions on the sleeves are outlined by a single line of gold tessellae within which shows a band of a ground of reddish-violet darker than that of the sleeve. On the band is set a row of whitish stones separated by intervals of the ground colour. Inside this band is a single concentric row of gold, within which is another line of the dark reddish-violet ground surrounding a circular ground of gold. The centre of the circle contains a rectangular jewel composed of an outline of red tessellae followed by a line of gold within which the gem has a centre of rose marble surrounded by one row of burnt-sealing-wax-red tessellae. A whitish stone outlined in small bluish-violet tessellae is set in the gold ground opposite each of the three visible sides of the centre ornament. Most of the tessellae of the cuff and sleeve of the left forearm are missing. Those remaining and the painting on the setting-bed indicate a cuff of alternating reddish-violet and gold stripes of one row of tessellae.
66		Collar	Little of the collar remains. Fragments of its right side outline consist of black-violet tessellae—the same as in the right outline of the check, and of a few burnt-sealing-wax-red tessellae. Two whitish stones of a possible border remain at the upper right side. The ground of the collar is shown in gold tessellae on which are the fragments of a series of four circles in red glass tessellae.
67		Shoulder-piece	<p>The centre band of the shoulder-piece shows a ground of gold tessellae set with two pairs of rectangular jewels separated by groups of round pearls. Each jewel consists of vertical green rectangles, two tessellae in width, surrounded by a single line of gold followed by one of the darker red. The pearls set on this gold background are represented by whitish round stones, each surrounded by a single line of violet-blue tessellae. This band is edged from above and from below by a single line of burnt-sealing-wax-red tessellae between two lines of gold. From the centre of the upper edge to its left end, the red tessellae are of deeper tone. The upper and lower borders of the garment are single rows of dark reddish-violet followed by a row of gold tessellae.</p> <p>The narrower top band shows a ground of dark reddish-violet in which are set, on her right, a red and, on the left, a green square jewel in a gold claw setting, separated by a single line of round pearls.</p> <p>The lowest band shows a ground of dark reddish-violet tessellae on which are set groups of pearls separating alternating red and green square stones in a claw setting. The centre of the red stone on her right is of rose marble surrounded by a line of burnt-sealing-wax-red. At the centre of each side a single gold tessella is set in the red outline to represent the claw. A line of gold surrounds the ornament. The next jewel is in two tones of green. The other two are similarly treated.</p> <p>The shaded part of the centre band is made of four rows of semi-opaque, yellowish-brown glass tessellae. The row next the gold ground is of light greyish-green glass.</p>
68		Loros	The loros, composed of three bands, is 0.26 m. wide, and is outlined by single rows of gold. The two outer narrow bands are similar in treatment to the shoulder-piece, showing green jewels in claw setting separated by groups of six stones on a ground of dark red-violet. Each jewel is of varying tones of yellowish-green glass, surrounded by a line of deep green. The broad centre band of gold tessellae is separated

	Position	Detail	Particulars
	ZOE	Loros	<p>from the border at each side by a line of deep red tessellae. Below the border of the shoulder-piece are two round jewels in two tones of green, surrounded first by a concentric line of gold, then by a line of deep red, and, in part, by an outer concentric circle of gold. In the centre of the loros below the round jewels is a square one of green, set on its diagonal and similarly framed. Opposite the centre of each face of it is a pear-shaped red jewel in three tones, the centre of rose marble, the next line of burnt-sealing-wax-red, the outline of deep red glass tessellae. Whitish stones surrounded by single lines of bluish-violet represent pearls and are informally arranged about the larger ornaments on the gold ground. The gold cubes are set with unusual irregularity. A fragment of the outer narrow band of the loros is seen, on her right, below the scroll, showing its dark ground with three whitish stones. Of the centre band only the single row of red and a number of tessellae of the gold ground remain. A triangular portion of the border of the loros appears from behind the 'thorakion' at the lower broken edge of the mosaic, showing a rectangular ornament, similar to those in the border of the loros above, indicated on the setting-bed in red. Indications of three whitish stones appear above the ornament in the painted preparation of the dark reddish-violet ground. Below, two whitish stones of the border remain and several tessellae of the dark reddish-violet ground.</p>
69		Girdle	<p>Only a few silver tessellae at the left side end of the girdle remain. They are outlined by a single row of dark reddish-violet, of which six tessellae are also visible at the broken edge below the left hand. On the setting-bed are clear traces of a round red ornament (the buckle?) beneath the hand.</p>
70		Thorakion	<p>Only three separate fragments retain tessellae, but almost the complete vestment is preserved in the painting of the setting-bed. The thorakion is outlined on her right by the shade of the turn of the vestment shown in two rows of brownish-grey tessellae inside which are two rows of yellowish-grey. The top is hidden by the girdle and the under-edge of the left sleeve. The setting-bed of the border of the thorakion, from the left sleeve to the remaining tessellae at the broken edge of the panel shows four square jewels in two tones, separated by groups of ten white stones in double rows on a dark reddish-violet background. The jewels are indicated alternating from above in red and green paint. However, as the lowest jewel painted on the setting-bed in green has preserved two red tessellae, we can assume that the alternation of the colours in the mosaic itself was in this case the reverse of the colours of the setting-bed, the mosaicist in the course of setting having changed the order of colours.</p> <p>The jewels and the groups of stones are surrounded by gold. One line of red separates the border from the ground of the thorakion. As shown by the preserved fragments, the ground of the thorakion was of gold tessellae.</p> <p>Remaining only in the setting-bed in the centre of the thorakion is the design of a jewelled cross of unequal arms in deep reddish-blue, five tessellae of which are still in position at the tip of the cross limb on her right. The jewel at the intersection of the limbs is indicated in red paint. Indications in the vertical limb above show one green jewel separated from the red by a group of five pairs of whitish stones, and from the upper tip of the limb by four pairs.</p> <p>Below the intersection a jewel indicated in green is separated from the red jewel above by six pairs of whitish stones.</p>

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
	ZOE	Thorakion	<p>Four square jewels lie on either side of the upright limb. Of the upper jewel at the tip of the cross at her right, one green tessella on a red setting-bed remains. The jewel was of two tones of green surrounded by a row of gold and an outer line of deep red. Five tessellae of the gold line, and parts of two sides of the red outline remain, and the lines are completed in the setting-bed. Beginning with the jewel near the tip of the cross, the setting-bed of the four jewels on her right shows red, green, red, green. On her left indications are alternately green and red.</p> <p>The upper fragment of the remaining tessellae preserves an oval jewel in deep rose outlined by one row of dark sealing-wax-red and surrounded by a single line of gold and a second of red. Traces of a similar ornament indicated in green on the setting-bed appear at her left on the opposite side of the upright limb. Above the oval jewel and near the two jewels flanking the tip, four whitish stones, outlined in blue, remain in tessellae. Traces of a fifth stone are found in the setting-bed, indicating a distribution in quincunx. Three whitish stones are indicated in the setting-bed above the tip of the cross, with their apex pointing upward, and two are outside the rectangular ornament in the upper limb of the cross. Groups of five whitish stones set in quincunx can be traced under each oval jewel and below the horizontal limb of the cross.</p> <p>Between the square jewels of the lower part of the thorakion, traces of whitish stones set in pairs are visible.</p>
71		Scroll	<p>The scroll is shown in whitish stone tessellae outlined below and at her left by one row of dark blue tessellae. Above the outline of the lower edge is a shadow in two rows of bluish-grey tessellae. The shadow of the coil at the end of the scroll on her right is a single oval row of the same dark blue.</p> <p>The first word, 'Constantine', and the end of the last word, 'Romaion', in the second line were not in the original inscription on the scroll. The average height of letters is 0.0235 m.</p>

JOHN PANEL

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
72	GENERAL DIMENSIONS OF PANEL		<p>Width, 2.76 m.; height, 2.47 m.; height from under edge of the moulding to the lowest edge of remaining mosaics, 1.42 m. Above is plaster moulding 0.04 m. thick, projecting 0.06 m. from the surface of the panel. Below is a similar moulding of marble. The height between the fillets is 2.47 m. The panel is bounded at the left by the edge of the recess of the window and at the right by the lateral face of the pilaster which projects 0.63 m. from the wall. To a height of 1 m. above the lower moulding, no tessellae remain. The original upper edge of tessellae is 0.05 m. below the plaster fillet. The edge of tessellae next the window recess is 0.13 m. inside the corner of the reveal. The length of preserved mosaic from this edge to the angle formed by the pilaster and wall is 2.63 m. In the height of 1.42 m. in which tessellae remain the panel inclines away from the onlooker an average of 0.025 m. and there is, throughout, a general unevenness of surface. The average height of the portrait heads above the gallery floor is about 3.80 m. or approximately 2.15 m. above eye level.</p> <p>The mosaic was covered with three layers of plaster. On the first layer</p>

	Position	Detail	Particulars
	GENERAL DIMENSIONS OF PANEL		<p>of plaster repair of the lower half of the panel was found a rough pencil drawing representing the figures of the panel.</p> <p>The marble wall surfacing below the panel is 0.83 m. from the floor.</p>
73	GENERAL BACKGROUND		<p>The average depth of the three plaster beds laid on the brick wall are: 1.2 cm. for setting-bed; 0.8–1.7 cm. for intermediate bed, and 2.5–4.5 cm. for rendering bed.</p> <p>The ground is of gold tessellae in relatively horizontal rows, set somewhat closer vertically than horizontally. The tessellae are exceptional in their infinite variety and irregularity in size, shape, and tints of gold. They vary from 0.002×0.003 to 0.011×0.013 m. The inter-use of different-sized tessellae in the panel is noticeable, and unevenness is further obtained by random groupings of large and small tessellae breaking the surface.</p> <p>Although comparatively few of the gold tessellae have scaled, they show many surface imperfections in the gold leaf. There are strong indications that this ground was set with cubes previously used. Only exceptionally are silver tessellae found in the gold ground. Gold tessellae of the ground form the upper and left mosaic edges of the panel.</p>
74	MOTHER OF GOD	Dimensions	Height from top of head to the lower edge of the remaining part, 1.24 m. Width of shoulders 0.465 m.
75		Head	<p><i>Dimensions:</i> height from crown of head to edge of garment at the throat, 0.345 m. Width of head at line of eyebrows, 0.245 m. Length of face from edge of head-dress to point of chin, 0.185 m. Width of face across cheek-bones, 0.153 m.</p> <p>The cubes are so nicely set that the interstices are scarcely visible to the observer. Tessellae are missing in the head in the following places: shade above the bridge of the nose, left brow, upper lid, inner corner and eyeball of the left eye, ridge of the nose, both cheeks, lower lip, contour of chin.</p> <p>A double row of gold tessellae completely outlines the figure against the background.</p>
76			<p><i>Colours of face:</i> high lights are in tessellae of light ivory stone. The flush of the cheeks is shown in rose. Tones of the shade of the face are rendered in varying gradations of the transition from light ivory to rose and in tones of olive-brown. The general outline of the face and neck is made in one uninterrupted line of blackest-violet glass tessellae.</p>
77			<p><i>Forehead:</i> from above the inner corner of her left eye, this outline is followed along the left side of the forehead and cheek by a line of yellow-olive which tapers to its end at the point of the chin. From the same point described above, a line of olive-grey outlines the right side of the forehead and, following down the cheek, ends at the centre of the opening of the garment at the throat. On the left side, a line of light and one of dark rose begin against the first olive-grey tessellae of the outline and render the rounding of the forehead above the left temple. The inner, lighted line intersects the outer top of the brow, while the darker continues down into the cheek. From above the intersection of the rose line with the brow, begin two lines of yellow-grey which cross the forehead; the outer continues down the right side of the face; the inner ends at the arch of each eyebrow. Below these is the high</p>

	Position	Detail	Particulars
78	MOTHER OF GOD	Head	<p>light in lightest ivory. It widens from a wedge of single tessellae at either end to a double line of the centre. From the high light, the rendering of the forehead grades to the shade above the bridge of the nose in three curving lines joining the brows. The shade is shown by four tessellae of warm greyish-olive.</p> <p><i>Eyes:</i> each eyebrow is shown by two lines: an upper line of greyish-olive-green translucent glass tessellae; a lower, shorter line of blackest violet. The shadow below the left brow is shown in two lines of light golden-brown glass tessellae. The upper one is of slender tessellae ending opposite either corner of the eye, and over the centre, skips a space of two cubes. The lower line begins at the outer corner of the eye, touches the under-line of the brow in the space left in the centre of the line above, and follows the ridge of the nose to the wing. The shade under the right brow is rendered in a single line of the same colour. The fold of the upper lids is rendered by single lines of shining bright red glass tessellae, below which the lids are represented by curving lines of warm greyish-olive tessellae of dull glass. A short line of the same tone follows above the outer points of the fold line of each eye, and above the inner tip of the right eye. The upper eyelashes are rendered by single lines of shiny blackest-violet glass tessellae. From the outer tips of these extend short lines of deep golden-brown, against which the lines described above are terminated. The pupils are circular glass tessellae of blackest violet surrounded by small stone tessellae of light plum-brown. The outer circle of each iris is shown in dark reddish-brown. The shadow of the upper lids on the eyeball is shown by single lines of light golden-brown following the curve of the upper lashes. The tessellae at the inner corner of the shadow of the left lid are missing. The shade of the lower rounding of the left eyeball is shown by a line of tessellae beginning at the inner corner in warm greyish-olive and ending at the outer corner in light golden-brown. The shade of the right is warm greyish-olive throughout. The high lights on the eyeballs to the right of each pupil are shown by single triangular whitish stone tessellae, outlined on the two edges toward the corner with small tessellae of greyish-white stone. The lower lashes are shown in curving lines of deep olive-green glass tessellae which meet the upper lashes at the outer corners, but are separated from them at the inner ends by a single tessella. The shade under the lower lids from the outer contour of the left eye and the inner corner of the right, begins in a single tessella of golden-brown and becomes two lines of half width. The lower line then tapers away against the lighter tone of the cheek; the upper continues in warm greyish-olive glass tessellae and also fades into the flesh of the cheek. The crescent of shade is completed in marble tessellae of dark ivory, which underline the horizontal row from its outer tip to the end of the brow. No lachry-matory glands are indicated.</p> <p><i>Nose:</i> the bridge of the nose is rendered by four golden-brown glass tessellae joining the inner tips of the brows. Continuing the curve of the left brow, the contour of the ridge of the nose is shown in darkest sealing-wax-red. The left shaded side is shown by the continuation of the line of golden-brown rendering the shadow under the brows; it ends against the wing of the nose. The second row rendering the shade is a continuation of the line of the upper lid of warm greyish-olive and ends beside the wing. The third line completing the rendering of the rounding into the cheek, of dark ivory stone tessellae, begins below the corner of the eye, passes the wing of the nose, and ends at</p>
79			

	Position	Detail	Particulars
80	MOTHER OF GOD	Head	<p>the corner of the mouth. The ridge of the nose is shown in three lines which follow the contour line beginning next it with a line of rose which follows the curve of the tip. The second line is of dark ivory. The third is the high light of ivory-white. It begins below the bridge with one tessella of dark ivory, narrows in the centre, and broadens again to show the high light on the tip. The shade of the right side is shown by a line of greyish-olive glass, continuing the curve of the right brow and dividing at the wing to render the shade of both the wing and the tip. The left wing and the tip of the nose are outlined to one tessella beyond the right nostril in brilliant sealing-wax-red. Two tessellae between the left nostril and the tip are missing. The right wing is outlined by three tessellae of rose marble. The flesh of the left wing is shown in rose tessellae next the outline and ivory inside. The flesh of the right is rendered by two short lines of dark ivory between the separate ends of the shade of greyish-olive. The nostrils are single rectangular tessellae of blackest violet.</p> <p><i>Cheeks: Left cheek:</i> from the left temple a line of golden-brown glass tessellae outlines the cheek and throat against the general contour of the face. It is followed inside by the line of olive-yellow which outlines the forehead above and tapers to its end at the point of the chin. Beginning at the outer tip of the brow, the flesh of the cheek is rendered by two lines of rose stone tessellae. The inner one is of light rose and curves into the cheek. The outer, deeper rose row divides in two. One dark line follows the light inner row part way into the cheek; the outer line of varying tones follows down the olive-yellow outline to the line of the mouth. Similar alternating tapering lines of light and dark rose branch from the longer line and penetrate the lighter tones of the cheek. Between the shade of the outer corner of the under lid and the origin of the lines of rose begin two lines of deep ivory stone tessellae which follow the curve of the shade and are joined by two other ivory tapering lines. As the four lines curve down from the shade of the under lid, they diminish to three at the corner of the mouth, and end against the under lip in two lines. Springing from the outer, fourth line of ivory are four short tapering lines which alternate with the light rose of the flush. Following the inner side of these lines from a point above the wing of the nose, a line of the same tone tapers to the corner of the mouth. Continuing the curve of the shade of the under lid and the shade of the side of the nose from its inner corner are two lines of lightest ivory stone tessellae which intersect at the inner corner of the eye. Tessellae in the triangular high light between these lines and the rows of ivory of the cheek, are of both light and dark ivory.</p> <p><i>Right cheek:</i> the cheek is outlined by the olive-grey line of shade which follows the side of the face from the forehead to the centre of the throat. Inside this, at the outer tip of the brow, begins a line of deep ivory stone tessellae which curves into the cheek and surrounds the flush. At the point from which the line of deep ivory leaves the outline, the latter divides with the inner line curving into the cheek, to begin a series of short lines of olive-grey branching from the outline and alternating with lines of deep ivory. A high light of the lightest ivory begins at the inner corner of the eye and follows the curve of the shade of the under lid to the horizontal line at the outer corner. Beginning from the same point is a second line of olive. Lines of dark ivory tessellae sweep down from the outer corner of the eye to penetrate the rose crescent-shaped flush. The line of the crescent tapers at the ends between</p>

	Position	Detail	Particulars
	MOTHER OF GOD	Head	<p>which the flush is rendered in alternating long and short lines of light and dark rose. Between the greyish-olive shade line of the nose and the flush are set dark ivory tessellae. A line of light ivory tessellae curves down from the wing of the nose touching the ivory line surrounding the flush, and ends at the parting of the lips. From the wing to the centre of the upper lip, it is followed inside by a tapering high light of lightest ivory.</p>
81			<p><i>Mouth:</i> the crease of the upper lip is shown in two glass tessellae of golden-brown. A high light below the crease is rendered by tessellae of lightest ivory, underlined by deep ivory. The left side of the lips is bounded next the cheek by the continuation of the dark olive line of the shade of the nose, of which the final three tessellae are one of greyish-olive and two of golden-brown. These tessellae and three of the same colour render in a horizontal row the shade of the upper lip. The flesh of the upper lip is shown in ivory stone tessellae. The fullness of the right side of the lip varies from the high light in the cheek through tones of ivory to a high light next the crease, and reaches its lightest tone at the peak of the curve next the crease. The shade of the right corner of the mouth next the cheek is rendered in greyish olive and light golden-brown tessellae. The red of the upper lip is rendered by a line of deep sealing-wax-red tessellae with one of blackest violet at either end. The under lip is shown by a thin curving row of brilliant sealing-wax-red. There is a slight high light of lightest ivory, on the fullness of the lower lip at the left corner of the mouth, and a more pronounced high light on the right. The shade of the lower lip is a curving line of relatively large greyish-olive glass tessellae underlined by a second line of golden-brown.</p>
82			<p><i>Chin:</i> the contour of the point of the chin is a single row of deep sealing-wax-red. The left side of the chin is outlined by the deep golden-brown general outline of the face and the inner outline of the olive-yellow which ends at the point of the chin. At the lower end of the rose tessellae of the flush of the left cheek is a row of greyish-green tessellae, which is continued around and ends next the general outline of the side of the face. The rounding of the chin is rendered by three lines, varying in tones of rose; olive-yellow tessellae are set at either end of the two inner lines. The flesh of the chin is rendered by three lines of ivory with the darkest tone in the middle. The inner line stops on the left against a single tessella of olive-yellow at the shade of the under lip. The high light is shown by two lines of light ivory.</p>
83			<p><i>Neck:</i> following its contour line, the shade of the rounding of the chin is shown in a line, beginning in the golden-brown outline of the left side of the face, which changes to olive-yellow at the centre of the chin and lightening as it curves up to the outline of the face on the right. A curved line of darkest blue, tapering at the ends, represents the contour line of the chin against the throat. The shadow on the throat is shown in three curving lines of glass tessellae. That next the contour line is in golden-brown on the left and changes at the centre of the chin to greyish-olive-yellow. The second line is in varying tones of greyish-olive-yellow; the third line of shadow, springing from the second, is of the same tone, changing under the chin to the tone of the outline on the right of the face and curving up to it. The rounding of the throat on the left is rendered by the golden-brown outline, an inner line of olive-yellow, and two lines of rose, which begin opposite the darkest-blue outline of the chin. Three lines of lighter rose spring from the inner of these two rows and penetrate the ivory tessellae of the</p>

	Position	Detail	Particulars
	MOTHER OF GOD	Head	throat. Between the second and third row is a short line of rose tessellae. On the right, below the meeting of the outline and the outer line of the shadow of the chin is a high light of the lightest ivory, tapering at each end, and curving down to the point of middle line of rose. The second line of tessellae within the border at the lower corner of the opening in the garment is a shorter, similar high light. Within the outline, the shadow of the chin, and the penetrating lines of rose, the remaining lines are all in deep ivory tessellae.
84		Hands	<i>Left hand:</i> length, 0.140 m. The hand is outlined in burnt-scaling-wax-red glass except from the wrist along the lower side of the hand and little finger. This outline, like the line separating the hand from the sleeve, is made of blue-black glass. There are also two blue-black glass tessellae at the base of the lines separating the fingers. The thumb is made of stone tessellae showing a faint whitish high light at the upper outside edge. The other tessellae are of brownish-white running into shell-pink near the lower outline of the thumb. There are indications of a thumb nail made by four shell-pink stones around a whitish stone. The first, middle, and third fingers are two lines of stone—the upper whitish, indicating a high light, and the under light brownish-white. The little finger is of two lines of tessellae, the upper shell-pink stone and the lower darker one being of a light greenish-brown glass. These lines of the fingers are carried along the back of the hand and taper off near the sleeve. The line separating the third and fourth fingers is continued along the back of the hand in shell-pink stone. The other two separating lines between the first and middle fingers and the middle and the third fingers are continued in a light brownish-white stone along the back of the hand. There is an ellipse-like line of shell-pink stone along the edge of the first finger bone just above where it joins the thumb. Below is a line of whitish stone indicating a high light. Another high light in two rows forming an ellipse is shown between this shell-pink line and the upper outline of the hand.
85			<i>Right hand:</i> length, 0.154 m. It is represented with the same arrangement of tessellae as the left, except the modelling between the first finger and thumb. The tonality is much the same in both hands: the back of the right hand near the sleeve is somewhat lighter. Between the thumb and first finger there is a longer line of shell-pink stone indicating the modelling with a more pronounced high light above rendered in an ellipse of two rows of whitish stone. The thumb nail is shown by two shell-pink stones around one whitish stone.
86		Handkerchief	The handkerchief is made of ivory stone tessellae outlined by a row of light greyish-green glass. Rows of the same ivory stone hang from the end of the handkerchief, indicating the fringe.
87		Nimbus	Diameter 0.49 m. The circle is made of one row of burnt-scaling-wax-red glass tessellae.
88		Monograms	Average height of letters, 0.094 m.; breadth, 0.125 m. The letters, the omission signs, and the accents are in large tessellae of blue-black glass slightly raised from the surface of the gold background, the tessellae of which outline them in one or sometimes in several rows.
89		Maphorion	This vestment is rendered in tones of blue glass ranging in value from a deep blue almost black to a light greyish-blue. The darkest tessellae

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
	MOTHER OF GOD	Maphorion	are translucent and the lighter are opaque. The outline of the maphorion over the head and body, round the face and neck, and the folds of the vestment are made by lines of deep blue glass. The edges of this garment and the fringe ending in small crosses are represented in gold glass. The three segmenta are formed by large gold pear-shaped tessellae surrounding a round central one.
90		Stola	The stola is represented in the same glass tessellae as the maphorion with one more tone—a light blue-grey shown below and at the right of the handkerchief and in the folds below the feet of the Child. The tonality of the stola below the Child is lighter than that of the maphorion. The edge of the stola along the gold edge of the maphorion is given in deepest-blue glass.
91		Cap	The same light blue-grey glass tessellae are used in the cap as in the stola. The stripes of the stuff at either side of the face and forehead are rendered in blue-black glass tessellae, similar to those which outline the face and the maphorion.
92	CHILD	Dimensions	Height from top of head to right toe, 0.675 m.; width at shoulders, 0.194 m.
93		Head	Height of head from top to tip of chin, 0.148 m.; width of head above eyes, 0.125 m.
94			Tessellae are missing on the head and neck in the following places: middle of forehead, left part of right eye, right part of left eye, lower left side of nose, mouth, lower part of left cheek near mouth, upper part of right ear, small section at left of middle of neck.
95			<i>Colours of face:</i> the brownish-white, the whitish, and the two tones of rose of the face are stone tessellae, as are the reddish-brown, the golden-brown, and the brownish-mauve of the hair. The two tones of light greenish-brown used in the face are almost opaque glass tessellae. The dark reddish-brown glass tessellae of the eyebrows, the burnt-sealing-wax-red glass in the face, and the blue-black glass tessellae that form the inner outline of the hair are translucent.
			<i>Hair:</i> the hair is outlined against the nimbus, on the left side, by a line of deep reddish semi-opaque glass tessellae, which changes into a line of dark olive-green for the right side. An undulating blue-black row runs from the right temple to the left separating the hair from the forehead. Below the beginning of this blue-black outline on the right side are two glass tessellae of deep reddish-brown. The wavy lines of tessellae on the right side of the head are of reddish-brown stone, with a few high lights in golden-brown stone set between them. The first lock at the right is a light greenish-brown stone line, the next, a darker greenish-brown stone, the third a dark brownish-red glass, and the fourth a line of two tessellae of violet-black glass. A continuation of the second lock runs up into the hair as a high light and is golden-brown stone. On the left side of the head the hair is rendered by the same wavy lines of stone tessellae. Here they are of brownish-mauve, darker in tonality than those on the right lighted side of the head. High lights of golden-brown stone are shown next to all the five curves of the dark outline of the hair against the left of the forehead and in shorter strokes between the rows of brownish-mauve stone. Curls are visible below each ear. Their outline against the nimbus is of deep reddish-brown glass tessellae; a line of violet-black glass tessellae starting

	Position	Detail	Particulars
	CHILD	Head	just from below the lobes of the right and left ears separates the locks from the cheeks. The right lower curls are rendered by reddish-brown stone next to the cheek outline, and golden-brown stone next to the outer outline. The left lower curls are brownish-mauve near the cheek and a lighter brown near the exterior outline.
96			<i>Forehead:</i> the forehead is outlined on the right by a row of light greenish-brown glass, running from the lock in the centre of the forehead down the tip of the chin. There are small triangular tessellae of the same coloured glass filling the three inner points at the joining of each curve of the blue-black hair outline. The left side of the forehead against the hair outline is made of greenish-brown glass tessellae beginning at the left of the lock in the centre of the forehead and continuing down the entire left side of the face and neck. Next to this line also beginning at the centre of the forehead in the middle of the curl are three curved rows of rose stone tessellae. The row nearest the middle of the forehead is the lightest, being a shell-pink and the other two, light rose. The remainder of the forehead except for three high lights is rendered in light brownish-white stone tessellae. The largest high light of two curved rows of whitish stone in the middle of the forehead is separated from the locks by two rows of light brownish-white stone. The other two high lights are single curved lines placed just above each eyebrow.
97			<i>Eyes: Right eye:</i> the eyebrow is made by a row of reddish-brown glass tessellae. The modelling of the hollow under the eyebrow and over the eye is made by a row of burnt-scaling-wax-red glass tessellae placed directly under the eyebrow. The outer end of this red line is separated from the eyebrow by a line of light greenish-brown glass that is wedged between the two. Between the red line of modelling and the upper eyelash is another large row of this same light greenish-brown glass extending from the inner to the outer points of the eye. The upper eyelash is represented by a somewhat damaged line of blue-black glass—the lower eyelash by a larger line, also partly damaged, of the reddish-brown glass used in the eyebrow. The pupil of the eye is missing, but the painting on the setting-bed shows that it was made by a single round tessella of violet-black glass. The white of the eye is damaged except for one small tessella of a whitish stone at the right of the eye.
			<i>Left eye:</i> is represented in the same way as the right eye, only it is noticeably larger. The pupil is represented by one circular blue-black glass tessella. The white of the eye is partly damaged and the remaining part at the left side of the pupil is represented not by tessellae but by plaster painted a light greyish-green. At the outside of the left eye is a small narrow reddish-brown glass tessella pointing toward the temple.
98			<i>Nose:</i> the left edge and the tip of the nose are outlined in a partly damaged line of burnt-scaling-wax-red glass. The right nostril is shown by one tiny triangular blue-black glass tessella. The outside point of the left nostril is given by a small burnt-scaling-wax-red glass tessella. The bridge of the nose is represented by two small rows of glass tessellae. The upper row is a light greenish and the under, a darker greenish-brown. The ridge is made of two rows of stone to which a third is added near the end of the nose. The row at the right is of whitish stone. Following and next to the red outline of the nose is a row of greenish-brown glass tessellae that is a continuation of the line of tessellae just above the left upper eyelash. The right side of the nose edging the right cheek is of light green which is a continuation of the line of the right eyebrow and extends to the line of three greyish-white stone tessellae that are just above the right nostril and form its wing.

	Position	Detail	Particulars
99	CHILD	Head	<i>Ears:</i> they are outlined against the nimbus in a line of burnt-sealing-wax-red glass. Tessellae of the same colour, rose stone ones, and blue-black glass mark the flesh and the shadows in the middle of the ear. The edge of the ears is marked by rose and brownish-white stones. The edge of the lobe of the ears next to the cheek is a row of whitish stone.
100			<i>Cheeks: Left cheek:</i> this cheek is outlined at the right by a line of light green glass tessellae that begins just below the inner point of the left eye and ends at the burnt-sealing-wax-red glass tessella marking the outer point of the left nostril. The cheek outline against the ear and curls below the ear is an outer row of greenish-brown glass tessellae starting at the top of the ear below the hair and running down to the chin. There is another row of the same colour next to this outline that is a continuation of the outline of the left side of the forehead against the hair. This line continues to the chin. Directly under the left eye is a line of light green glass tessellae that begins at the outer point of the eye and ends near the inner point wedged between the line of the lower eyelash and a high light. The cheek below this high light and to the left of the nose is rendered in stone tessellae of brownish-white flesh tones. The flush of the cheek is made by two curved rows, an outer of light rose stone nearest the nose and an inner row of shell-pink stone placed at an angle. Both these curved lines surround three brownish-white stone tessellae. Between the flush of the cheek and the two greenish-brown shadow lines at the edge of the cheek next to the ear are two lighter rows of tessellae. The outside nearest the ear is of light greenish glass, and the other light brown marble. The outside line runs from the lower point of the lines of rose marble on the left of the forehead and ends near the point of the chin. The inner line begins outside the last tessella of the left eyebrow and ends in the middle of the chin.
			<i>Right cheek:</i> the exterior outline of this cheek against the ear is a line of greenish-brown glass running from the lower point of the hair above the ear to the blue-black line of glass separating the cheek from the curls. Next to this line is a line of light green glass that continues a similar line on the right edge of the forehead next the hair and ends at the beginning of the point of the chin. Under and following the lower right eyelash is a line of light green glass, below is one of whitish stone running from the outer to the inner point of the eye and indicating high light. At the end of this high light near the outside point of the eye is a high light made by a short slanting line of whitish stones. There is another high light of a curved line of whitish stone running around the wing of the right nostril. The flush is like that on the left cheek only slightly larger. The other cubes of this cheek are in light brownish-white flesh-tint stone tessellae.
101			<i>Mouth:</i> the tessellae of the mouth are missing except for one rose stone that is in the centre of the lower lip and one brownish-green tessella at the left corner of the mouth. Just below the tip of the nose is one green glass tessella. Another light greenish glass tessella suggesting a shadow remains at the right corner of the mouth.
102			<i>Chin:</i> the rounded tip of the chin is represented by a line of burnt-sealing-wax-red glass tessellae. Above it are two rows of stone tessellae, the lower rose and the upper shell-pink. Just below the mouth remain two brownish-green glass tessellae that mark the shadow under the lower lip. The remainder of the chin is in stone tessellae of a light brownish flesh-tint.

	Position	Detail	Particulars
103	CHILD	Neck	<p>The left outline of the neck is of three blue-black glass tessellae and ends in two dark greenish-brown glass tessellae at the joining of the neck and shoulders. The outline of the left cheek of brownish-green glass tessellae runs down the left side of the face under the burnt-sealing-wax-red line at the point of the chin. At the centre of the chin this brownish-green line becomes sage-green and joins a similar green line of glass tessellae that begins at the joining of the right cheek and neck and continues to a point in the middle of the throat just below the dark shadow line made by four reddish-brown tessellae. Here the sage-green line connects with two rows of brownish-green glass. The entire left side of the neck is rendered in tessellae of this brownish-green glass.</p> <p>The right outline of the neck is of blue-black tessellae. Next to this line is one of sage-green glass. The line indicating the joining of the throat and chest on the right is of sage-green glass tessellae, and on the left of brownish-green glass. The high light on the right side of the neck is in light brown flesh-tinted stone. The throat on the left just above where it joins the chest is in three curved rows of stone—the right shell-pink, the centre light rose, and the left dark rose. The tops of these lines are made of large tessellae that taper into fine lines at the lower centre of the throat.</p>
104		Chest	<p>The chest is rendered in light brown-white tessellae. Just below the left of the neck are two curved rows of stone—the left rose and the right shell-pink. These rows are formed by large tessellae at the top that taper into fine lines at the white edge of the chiton. To the right and touching the line of union of the throat and chest is a slanting high light of whitish stone tessellae which runs down to the white edge of the chiton. At the right where the neck and cheek meet and next to the line at the joining of throat and chest is a row beginning sage-green and continuing to the chiton in greenish-brown glass.</p>
105		Hands	<p><i>Left hand:</i> the greatest width is 0.050 m. The fingers are outlined in burnt-sealing-wax-red glass tessellae. Each finger is of two lines of light brown stone tessellae. The tip of the thumb is damaged. The upper edge near the base of the thumb has a double row of small shell-pink stones next the red outline. The lower part of the first, middle, and third fingers next the red outline is of two shell-pink stone cubes.</p> <p><i>Right hand:</i> length from middle finger to wrist, 0.075 m.; greatest width, 0.045 m. The hand is outlined in burnt-sealing-wax-red glass. A line of greyish-green glass runs next the red outline along the under side of the hand and wrist ending at the red outline of the thumb. Just above this line is one of shell-pink stone. The rest of the wrist is made of five light brown rows and two whitish stone rows. The tessellae in the centre of the wrist are missing. Above the shell-pink line in the lower part of the hand is one row of light brown stone. Above this is another of greyish-green glass and one of shell-pink stone. These two lines curve from near the lower joint of the thumb around and up, ending at the red outline of the hand at the point of the wrist. Other parts of the hand and each finger are made in two tones: whitish stones indicating high light and light brown the shaded parts.</p>
106			
107		Scroll	<p>The scroll is made of ivory stone tessellae and is outlined in light green glass.</p>
108		Feet	<p><i>Left foot:</i> width, 0.042 m. The foot is outlined in burnt-sealing-wax-red glass tessellae. At the base of the red line separating each toe is one</p>

	Position	Detail	Particulars
109	CHILD	Feet	<p>blue-black tessella. At the base of the third and middle toes is a greenish-brown glass tessella with one of shell-pink next to it. The great toe is rendered by two rows of whitish stone; the other toes by one row each: the first toe of a whitish stone, the middle, third, and little toe of light brown stone tessellae. Nails at the tip of the middle and third toes are indicated by a whitish stone tessella. The right side of the foot is in high light and is a double line of whitish stone continuing the toe that becomes one row near the ankle. At the left side of the foot is a row of greenish-brown glass tessellae next to the red outline and running just to the little toe. Next to this line are two rows of shell-pink stone tessellae. The rest of the foot is rendered by four rows of light brown stone that widen as they near the toes.</p> <p><i>Right foot:</i> length from second toe to ankle: 0.08 m.; greatest width, 0.048 m. This foot is also outlined in burnt-sealing-wax-red glass tessellae. Similarly to the left foot, at the base of each red line separating the toes is set a blue-black tessella, and at the base of the first, middle, and third toe is equally a greenish-brown glass tessella with a shell-pink stone next nearer the tip of the toes. Nails are indicated by a whitish stone at the tip of all toes except the little one. Each toe is of one row of light brown stone tessellae doubled at the base of the great toe. At the right of the ankle are three burnt-sealing-wax-red glass tessellae next to the outline of the same colour. At the base of these three tessellae begins a line of brownish-green glass that follows the right outline of the foot. Following them is a row of shell-pink stone. This row is doubled as it nears the toes. The rest of the foot and ankle is in light brown stone tessellae, with a whitish high light in the middle of the foot.</p>
110		Nimbus	Diameter, 0.243 m. The outer contours of the nimbus and of the limbs of the cross are made by a single row of greyish-green glass tessellae. The background of the nimbus is of gold cubes placed in curves concentric with the green outline.
111		Cross	The limbs of the cross are filled with silver tessellae. The different values of the semi-translucent glass upon which the silver is mounted, make these limbs vary in tone.
112		Chiton	The chiton is of gold tessellae with a neck-band of light blue edged in a row of whitish stone. Another row of the same whitish stone is used to edge the sleeve of the chiton over the right arm. The folds are indicated in burnt-sealing-wax-red glass tessellae, and the shaded parts in these folds by brownish-green opaque glass and other rows of tessellae of a somewhat lighter grey-green.
113		Himation	This vestment is rendered in gold tessellae. The folds and shadows made by the folds are shown in the same way as in the chiton. The space just below the right little finger of the Mother of God is not filled with cubes but is plaster painted a greenish-grey.
114	JOHN COMNENOS	Dimensions	Height from top of the crown to lower edge of remaining tessellae, 1.21 m.; width at shoulders, 0.52 m. A double row of gold tessellae outlines the whole figure.
115		Head	Height of head from lower rim of crown to tip of beard, 0.26 m.; width, 0.24 m.

	Position	Detail	Particulars
	JOHN COMNENOS	Head	<p><i>Damaged parts:</i> forehead above right eyebrow, middle part of right eyebrow, side of right temple, upper part of cheek under right eye, right corner of right eye, most of left eye, most of nose, part of left cheek, mouth, parts of beard, part of left curl immediately below crown, upper part of right curl by eye, middle of the left one, and ends of both curls. The painted surface of the setting-bed made visible by the fallen tessellae is preserved and shows the colours used to direct the mosaicist. There is a yellowish-rose indicating rose stone tessellae, light yellow for tones of yellowish-brown stone, brown for olive-green tones of glass, reddish-brown for burnt-sealing-wax-red glass, and brownish-black for blue-black glass tessellae. The average size of the tessellae used in the face and beard varies from 0.002 × 0.004 m. to 0.003 × 0.005 m.</p>
116			<p><i>Colours of face and beard:</i> the general outlines are rendered in violet-black glass tessellae with a highly glazed surface. Burnt-sealing-wax-red glass tessellae with the same highly glazed surface were used to outline the nose. The shaded parts of the face are in tones of rose marble and variations of ochre-yellow stone; the lighted parts are in light yellow flesh-tinted stone and shell-pink marble tessellae; and the high lights are in a whitish stone. The beard is in two tones of greenish-brown and olive-green translucent glass, and the lines of shadow in the beard are in blackest-brown glass with a less shiny surface than the other dark-toned tessellae used at the outline of either side of the face against the hair.</p>
117			<p><i>Hair:</i> the outline of the hair from the crown to the collar along both sides of the face is made by a row of blue-black glass. The lighted parts of the hair are rendered by glass tessellae of an olive-green tone. Undulating lines of blue-black glass indicate the contours of the curls.</p>
118			<p><i>Forehead:</i> below the edge of the crown is a fine line of small glass tessellae of a reddish-violet colour indicating the outline of the crown on the forehead. The flesh tones of the forehead are given in ochre-yellow and light yellow flesh-tint stone. The modelling of the forehead is shown by curved lines of shell-pink stone. Two of these lines start at the bridge of the nose, one ends above the outside point of the left eye, the other—a longer curve—ends on a line with the outside edge of the right cheekbone. Above the bridge of the nose in the centre of the forehead is another smaller fine curved line—an inverted arc—of shell-pink stone. Other indications of modelling are made by high lights of curved lines of whitish stone tessellae over and following the brows. There are also two lines of whitish stone high lights separated by a line of light yellow flesh-tinted stone between the shell-pink shadow line in the middle of the forehead and the lower edge of the crown. The shadow on the right side at the joining of the forehead and the hair is indicated by a damaged line of sage-green glass that follows the contour of the face as far down as to be on a line with the mouth. The end of this line is of olive-green glass indicating the beginning of the beard. The shaded part of the left side of the forehead is made by a row of ochre-yellow stone tessellae.</p>
119			<p><i>Eyes:</i> the eyebrows are rendered by two rows of glass tessellae; the upper is olive-green, the lower blue-black. The upper eyelashes are indicated by a curved line of blue-black glass. Two curved rows of stone tessellae mark the eyelids—the one nearest the eye being a light yellow flesh-tint, and the other a rose. These lines, from which several tessellae are missing, run from the inner to the outer points of the eyes. The shadow between the eye and the eyebrow is given by a thin line of rose stone, placed directly above the two rows indicating the eyelid. The space</p>

	Position	Detail	Particulars
	JOHN COMNENOS	Head	<p>between the left eyelid and the left eyebrow is filled by three rows of stone tessellae at the left and four on the right. The top and bottom rows are of a light yellow flesh-tint and the two middle rows are lighter, one being of a whitish tone indicating a high light. There is a more pronounced high light in whitish stone just above the line of the upper left eyelashes nearest the nose. The tessellae in the space between the right upper eyelashes and eyebrow are almost entirely missing but the painting on the setting-bed shows that there were five rows of tessellae at the right of this space and three rows near the bridge of the nose, in tonality much like the tessellae above the left eye. The iris of the right eye is made by one circular row of dark olive-green glass tessellae. The pupil itself is a round blue-black tessella. The lower circular row of tessellae outlining the bottom of the iris is made of the same blue-black glass. The white of the eye between the pupil and lower eyelashes and to the left of the pupil is represented by light grey stone. The part at the right of the pupil is made by whitish stone, and that next to the upper eyelash is given by one row of very light green glass. The lower eyelashes are shown by a single line in which a few dark olive-green glass tessellae remain.</p> <p>The tessellae of the left eye are almost entirely missing. A tiny rose stone in the point of the left eye nearest the nose indicates the lachrymatory gland.</p> <p><i>Nose:</i> that the outline of the left side and tip of the nose was a narrow row of burnt-sealing-wax-red glass may still be seen by the setting-bed and by the three remaining tessellae. This outline begins at the starting-point of the left eyebrow, and ends with one blue-black glass tessella indicating the outer point of the wing of the right nostril. Three sage-green glass tessellae remain of a shadow line that ran along the right side of the nose just to where the modelling of the wing of the right nostril begins. The edge of the right nostril is given by one line of shell-pink stone. It can be seen from the few remaining tessellae that in the middle and in the tip of the nose along the right side of the ridge were high lights. The left side of the ridge of the nose is rendered by two lines of yellowish flesh-tinted stone and a darker line of shell-pink stone at the right next to the burnt-sealing-wax-red outline of the nose.</p> <p><i>Cheeks:</i> <i>Left cheek:</i> the outline of the cheek against the hair is made with ochre-yellow stone tessellae and greenish-brown glass ones at the joining with the beard. There are six sage-green glass tessellae remaining of a line that renders the right outline of the cheek near the burnt-sealing-wax-red outline of the nose. The flesh tones to the left of the nose are in varying values of yellowish flesh-tint. The tones of the cheek tessellae become darker as they near the beard. At the point of union of the cheek and beard the tessellae are in tapering rows of ochre-yellow stone alternating with wedge-shaped lines of rose stone. The most prominent high light is a damaged row of whitish stone running from the innermost point of the eye socket to the outer edge of the cheek along the edge of the cheek-bone. There is another high light on the apple of the cheek at the left near the hair separated from the first high light by one row of yellowish flesh-tinted stone. The flush of the cheek is shown by an oval-shaped section of stone tessellae of various tones of rose and shell-pink. The deepest tone is a line of rose stone outlining the right edge of this oval. The plane that runs from the left nostril along the jaw-bone to the edge of the moustache and ends in the beard is done in varying tones of light ochre-yellow stone. There is the remnant of a row of shell-pink stone tessellae starting above the</p>
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121			

APPENDIX

	Position	Detail	Particulars
	JOHN COMNENOS	Head	<p>left wing of the nostril and continuing to a point at the left of the left corner of the mouth.</p> <p><i>Right cheek:</i> below the dark line of the lower eyelashes there remain two rows of ochre-yellow stone tessellae that taper into a point as they reach the corner of the eye nearest the nose. Starting below and a little to the right of the innermost point of the eye and continuing down toward the middle of the edge of the cheek near the hair is a slightly curving line of shell-pink stone, indicating the hollow under the eye. Under it is a high light made by one row of whitish stone following the line of the cheek-bone as it begins at the inner point of the eye and curves out over the apple of the cheek near the hair. The flush as in the left cheek is an oval section of colour. It is made of alternating rows of shell-pink and rose stone. The darker lines of rose are smaller than the shell-pink; the latter, near the hair, alternate with rows of light ochre-yellow stone, which also surround this entire oval of the flush. The plane between the flush and the nose to the inner point of the eye is made of slightly varying tones of ochre-yellow and yellowish flesh-tinted stone tessellae. There is a line of shell-pink stone running from the right wing of the nose to the right corner of the mouth where the moustache and beard meet, indicating a line of modelling in the face. Above this line is the slightest suggestion of a high light made by a row of whitish stone starting near the wing of the nose between the oval flush of the cheek and the line of modelling below it and becoming light ochre-yellow as it ends in the beard. From the right nostril toward the right corner of the mouth following the slightly curved flowing line of the moustache is a row of warm yellow stone tessellae that becomes ochre-yellow as it nears the beard. The triangular section between this line and the shell-pink line of modelling above it is rendered in whitish and light ochre-yellow tones of stone. The joining of the right cheek and the beard is made by lines of rose stone that start from the centre of the cheek and continue down into the beard at an angle toward the hair. The outline of the cheek against the hair is a considerably damaged line of stone tessellae, sage-green at the joining of the forehead, crown, and hair and becoming an olive-green at the joining of the hair, cheek, and beard.</p>
122			<p><i>Moustache:</i> the right side of the moustache is represented by three wavy rows of olive-green glass tessellae. A greenish ochre-yellow row of stone separates the upper line from the two lower rows. A fourth, partly damaged row of olive-green glass begins just above the right corner of the mouth under the outer ends of the three main rows. The left side of the moustache is represented by four flowing rows running from the tip of the nose to the beard. The upper row is olive-green, the one under it is brown-black, and the two lower rows are again olive-green glass. Two thin lines of brown-black are wedged between the last two olive-green rows. These darker rows indicate the shadow and the contours of the flowing moustache.</p>
123			<p><i>Mouth:</i> the tessellae forming the mouth are missing except for one small pointed rose stone in the extreme left corner of the lower lip and two light reddish-brown stone tessellae in the extreme right corner of the mouth forming the edge of the lower lip. From the paint remaining on the setting-bed the line separating the lips is shown as having been a row of burnt-sealing-wax-red glass, and the lower lip to have been done in shades of rose and shell-pink stone.</p>
124			<p><i>Beard:</i> the beard is made of alternating lines of olive-green glass and narrower lines of blackest-brown glass. The olive-green lines become</p>

	Position	Detail	Particulars
125	JOHN COMNENOS	Head	a lighter greenish-brown where the beard begins on the cheeks and chin. The brown-black lines accent the shadows and general flowing contours of the beard. The joining of the beard, chin, and cheek on both sides of the face is rendered by pointed lines of shell-pink stone that run wedge-shaped down into rows of the beard. The sides of the beard are outlined by the blue-black glass tessellae that outline the hair. <i>Chin</i> : in the chin most of the tessellae are missing. At both sides of the mouth beginning at either edge of the lower lip there are preserved double rows of a light brownish stone that run at a slight downward angle and taper off into the beard in much the same way as the moustache. Below these light tessellae the setting-bed shows the same colours as are used to render the hair of the beard. In the middle of the chin is a small area of setting-bed painted to receive tessellae of a yellowish flesh-tint. A few light brown flesh-tinted stones remain at the bottom of this section and run into the jagged edge of shell-pink tessellae that mark the joining of the chin and beard.
126		Hands	The tessellae of the hands are much the same in tonality as those used in the face, but are more evenly placed and are individually a little larger. <i>Right hand</i> : length, 0.170 m.; greatest width, 0.080 m. The thumb, first three fingers, and the tip of the little finger are outlined in burnt-sealing-wax-red glass tessellae. The lower outline of the little finger and of the hand is a row of reddish-violet glass. Blue glass tessellae set in the red outline mark the joining of the first and following fingers. The end of the thumb is made with two rows of stone—the upper being whitish to represent high light, and the lower a light yellowish flesh-tint. The first joint has below these two rows a third shell-pink row at the bottom. The edge of the first finger-bone down to where it joins the thumb is a row of shell-pink stone that continues out to the edge of the hand to within one tessella from the red outer outline. Between this shell-pink line and the outside outline of the thumb is an elliptical-shaped section of two rows of stone—the inner one a brownish-white and the outer an ochre-yellow. The first, middle, and third fingers are also uniformly made by three rows of stone tessellae at the base and by two rows as the fingers taper toward their ends. Whitish stone is used for the high light and shell-pink and brownish-white for shaded parts in the first and middle fingers. In the third finger the high light is less pronounced, being a row of brownish-white with an ochre-yellow line of stone below it. The little finger is of two rows of tessellae—the lower being a sage-green glass, and the upper a light rose stone. The colours of these lines of tessellae forming the four fingers are carried across the back of the hand to the sleeve including the high lights which taper off just before reaching the sleeve.
127			<i>Left hand</i> : length, 0.125 m.; greatest width, 0.083 m. This hand is rendered almost in the same way as the right hand. The same burnt-sealing-wax-red glass tessellae make the outline but do not continue to the tip of the little finger as in the right hand. This tip is outlined by a continuation of the reddish-violet line that makes the lower outline of the hand. The thumb nail is shown by three shell-pink stones around a whitish stone tessella. Underneath the thumb nail is a line of whitish stone.
128		Crown	The outline of the crown is a row of reddish-violet glass. Narrower cubes of this colour are used for its edge across the forehead. The circlet forming the base of the crown is edged both top and bottom by a

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
	JOHN COMNENOS	Crown	border made of round whitish stones representing pearls, alternating with gold tessellae. These borders are outlined by a double row of reddish-violet glass. The gold background of the circlet is also studded with a double row of whitish stones. The same border frames the ornament rounded at the top and placed in the centre of the circlet. The square lower section of this ornament contains a jewel made of light rose stone tessellae surrounded by a line of burnt-sealing-wax-red glass and one row of gold. The upper semicircular section of the ornament holds an oval-shaped, emerald-green glass tessella framed in gold. The upper rounded part of the crown, similarly to the circlet, is studded with round whitish stones on a gold background. The vertical limbs of the cross are in burnt-sealing-wax-red glass, and the horizontal limbs in light sapphire-blue glass; the round central stone is white. The prependicularia hanging at either side of the crown are of single gold tessellae alternating with round whitish stones. Each prependicularia ends in a cross made by four pear-shaped stones centring with a round one. The stone forming the upper limb of the right cross is missing as are three whitish stones in the left and two whitish stones and one gold cube in the right prependicularia.
129		Nimbus	The diameter is 0.515 m. The circle is drawn in one row of light sapphire-blue opaque glass surrounded on the outside by two rows of gold. The gold cubes of the background of the nimbus are set in concentric rows. The average tessellae within the nimbus is a little larger than those used in the background.
130		Inscription	The letters vary from 0.026 m. to 0.095 m. in height and are in burnt-sealing-wax-red glass.
131		Chiton	Only the collar of the chiton is visible. The tessellae in the lower right corner are missing. The collar is made of gold with wide-set rows of round whitish stones. Its lower edge is a row of dark rosy-brown glass in which there is a great variation of value among the tessellae; some are semi-opaque, others translucent, and others inverted gold.
132		Divitission	The material of this vestment is shown in varying shades of reddish-violet glass tessellae patterned in gold. The folds and shades of the sleeves and on the rest of the material are rendered in lines of glass tessellae of two tones of a deeper reddish-violet than those in the rest of the material, the deepest reddish-violet tessellae being used in the outline of the sleeves below the elbows. The armlets between the elbow and the shoulder on both sleeves are of gold, bordered by a double row of whitish stones set in gold and edged by a single line of reddish-violet glass. The square jewel in the upper border of each armlet is in burnt-sealing-wax-red glass framed in gold—that on the left arm is slightly damaged. The jewel on the lower border equally set in gold is of two shades of blue—the outside tessella of both being a deep sapphire-blue glass and the inside cube a lighter greyish-blue glass. The outside outlines of the right armlet excluding the borders, are of deep sapphire-blue glass; on the left armlet the gold tessellae are placed next to the dark line of reddish-violet glass outlining the divitission. The middle part of both armlets has a gold ground filled with an ornamental motive, the undulating lines of which are rendered in rows of deep sapphire-blue glass alternating with whitish stones. <i>The cuff</i> is separated from the divitission by a line of the darkest tone of

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
133	JOHN COMNENOS	Divitission	burnt-sealing-wax-red glass. The cuff itself is of gold in which is a design of burnt-sealing-wax-red glass. The edge nearest the hand is outlined with a row of darkest plum—almost black—glass that becomes a double row on the under side of the cuff. The edge of an undergarment of whitish stone is visible at the lower part of the cuff.
		Shoulder-piece	<p>The reddish-violet material of this part of the divitission almost entirely disappears under the gold ground of the ornaments. The bands which divide the shoulder-piece into rectangles and form its lower border are similar to the bands edging the armlets, i.e. a double row of whitish round stones are set on a ground of gold, edged on both sides by a row of reddish-violet tessellae. The whitish stones here have a light-brownish cast. The square jewels set at the intersection of the bands are in a gold setting. The upper jewel on the right side of the shoulder-piece is in sealing-wax-red glass, the lower one in sapphire-blue glass; the only jewel of these bands seen on the left side is in light green glass. The two gold rectangles on the right side of the shoulder-piece contain a sapphire-blue jewel in the upper rectangle and a burnt-sealing-wax-red one in the lower one. The single rectangle on the left side has a jewel made of sapphire glass tessellae in its lower part with greyish-blue glass tessellae above them.</p> <p>From the gold squares holding jewels on the border on the shoulder-piece are shown pearl-pendants made of two whitish stone tessellae, the upper pear-shaped and the lower round.</p>
134		Loros	<p>The loros, like the shoulder-piece, represents the same gold ground divided by jewelled bands into square sections. Here again each band has a gold ground studded with a double row of whitish stones and a reddish-violet edge. A square jewel adorns them wherever these bands cross. The large jewels set in each of the squares formed by the crossing of the bands have a gold setting with claws and are made in two tones of tessellae, the lighter one being in the middle. Beginning at the top and continuing down along the right outside border, these jewels are: emerald-green glass and lighter greyish-green glass; burnt-sealing-wax-red glass and light rose-coloured stone; sapphire-blue and greyish-blue glass; emerald-green glass with light greyish-green; and below the hand, partly seen, burnt-sealing-wax-red with light rose stone tessellae. In the left-hand row: burnt-sealing-wax-red glass and light rose stone; sapphire-blue glass with greyish-blue; emerald-green and light greyish-green; burnt-sealing-wax-red glass and light rose stone; and finally the jewel only partly seen below the wrist: green-emerald and light greyish-green glass.</p> <p>The smaller jewels set at the intersections of the bands reading from the upper triangular one down and from the right border to the left are: sealing-wax-red, greyish-blue, and sapphire-blue glass; emerald and light greyish-green glass; burnt-sealing-wax-red glass, and—the lower jewel under the right hand—sapphire and greyish-blue glass. The jewels set in the middle band are as follows: sapphire-blue and greyish-blue glass; burnt-sealing-wax-red glass; sapphire-blue glass; emerald and light greyish-green glass, and below the wrist, emerald and light greyish-green glass. In the left border band the jewels are: emerald and light greyish-green glass; glass of burnt-sealing-wax-red; sapphire and greyish-blue glass; emerald and light greyish-green glass; and below the wrist, burnt-sealing-wax-red glass and rose stone. The pattern of the horizontal section of the loros which crosses slantingly the middle part of the body is similar to</p>

	Position	Detail	Particulars
138	IRENE	Head	right eye, left corner of left eye, part of contour of right cheek, left wing and tip of the nose. <i>Colours of face:</i> the entire face is outlined by an uninterrupted row of regular small dark brown glass tessellae. The general tone of the face is light brownish-white flesh-tint with a flush shown on the cheeks and tip of the chin. The modelling of the face is obtained by shell-pink and different shades of rose stone tessellae and greenish-brown glass tessellae.
139			<i>Hair:</i> tessellae are missing in the upper right curl near the forehead and crown, also along the edges of each curl hanging on either side of the face. The hair is outlined outside by burnt-sealing-wax-red glass tessellae. The contours of the wavy hair and the curls hanging down on either side of the face are regularly drawn in short broken lines of the same burnt-sealing-wax-red glass. The lighted parts of the hair are in alternating rows of light and darker golden-brown, which follow the natural direction of wavy hair. Between the crown and the outline of the forehead a line of burnt-sealing-wax-red glass joins the two parts of the hair on either side of the face.
140			<i>Forehead:</i> at the left side next to and following the upper curve of the dark brown outline beginning at a point above the pupil of the left eye is a short line of rose-coloured stone. Below this line runs a shell-pink row starting above the inner point of the left eye next to the outline below the crown and continuing to the tip of the chin. The rest of the forehead is in tones of light brown with high lights in whitish stone. The darkest of these brownish tones is at the right temple and a line in the middle of the forehead following the modelling of the forehead. A high light in the middle of the forehead is of two lines of whitish stone tessellae that taper into single pointed lines at either end. Another high light in a single wavy line of the same whitish stone begins near the outer end of the right eyebrow, and runs over the top of this eyebrow across the forehead to the left eyebrow ending near the temple. Above the bridge of the nose is a dark line composed of one large greenish-brown and one small ochre-yellow tessella.
141			<i>Eyes:</i> <i>The left eye:</i> the eyebrow is of two fine lines: one of dark reddish-brown glass tessellae and above it another line of golden-brown stone. Directly below the eyebrows are two lines of the lightest shell-pink stone which extend below the outer end of the eyebrow. Between these lines and the rose stone line that marks the hollow above the eyeball are rows of light-brown flesh-tinted stone tessellae. The upper eyelid is made by two rows of a darker brown flesh-tint stone. The upper eyelash is of darkest-brown glass. The lower eyelash is of dark brown stone. The white of the eye is made by a line of grey stone just below the upper eyelash; it is doubled at the right of the iris. At the left of the iris, the white of the eye is of stone cubes of the lightest pinkish-white; at the right of the iris the cubes are slightly darker brownish-white. The iris is surrounded by a row of dark reddish-brown glass. The pupil is one round black stone tessella. Between the pupil and the outline of the iris is a circular row of grey stone.
142			<i>Right eye:</i> the parts of this eye and brow where the tessellae are not missing are rendered in the same way as the left eye but in a slightly darker tone of brownish flesh-tinted stone tessellae in the lines directly above the rose stone line marking the hollow between the eyeball and eyebrow. The lachrymatory gland is shown by two dark rose tessellae. <i>Nose:</i> the left side of the bridge of the nose is outlined in a line of burnt-sealing-wax-red glass continuing the line of the left eyebrow. This

APPENDIX

	Position	Detail	Particulars
	IRENE	Head	<p>line ends with two dark rose stone tessellae at the end of the nose. Following this red line from the eyebrow at the left is a line of greenish-brown glass ending at the left wing of the nose. At the right of the red contour of the nose beginning at the eyebrow and ending at the tip of the nose is a line of shell-pink stone. To the right of this are three lines of stone beginning at the dark row at the top of the nose and ending at the tip of the nose: the first, lightest brown flesh-tint, the next, a whitish stone high light, and the third of light ochre-yellow. The tip of the nose and the outline of the nostril is in burnt-sealing-wax-red glass. Above this red line is one of stone that begins shell-pink at the wing of the right nostril and ends dark rose at the wing of the left nostril. The wings of both nostrils are outlined against the cheeks by rose stone. The wing of the left nostril is of two stone rows of flesh tint that taper into one short row of rose. The wing of the right nostril is of three rows of stone tessellae—the one nearest the outline light shell-pink and the other two light-brown flesh-tint.</p> <p><i>Left cheek:</i> beginning at the inner corner of the eye and running down at an angle into the cheek to a point on a line just to the left of the middle of the eyeball is a short line of shell-pink stone. Between this line and the lower eyelash are four lines of brownish flesh-tint that taper into single lines at either point of the eye marking shadow under the eye. Below these lines beginning at the inner corner of the eye and extending to the temple is a line of whitish stone indicating high light. Beginning at the outer end of this whitish line and curving down to the round of the cheek bone are two whitish stone lines also indicating high light. The flush is given by ten slightly curved rows of stone tessellae in the middle of the cheek running horizontally across the face. These rows are shell-pink alternated with darker rose stone. The lowest line of the flush is shell-pink and not rose, thereby breaking the alternation. The lines of stone tessellae that run down the side of the nose from the inner corner of the eye and curve off into the flush are of light-brown flesh-tint. The outside row of stone tessellae that follows the outline of the face to the chin at the left is of dark pinkish flesh tone. The line next to it and the others between it and the flush that curves into the cheek above the chin, are of lightest-brown flesh-tint. Another high light in a row of whitish stone begins at the upper point of the wing of the nose and runs down the face at an angle toward the corner of the mouth.</p> <p><i>Right cheek:</i> this is rendered as the left cheek except that the most prominent high light in a double line of whitish stone is not on the round of the cheek-bone but continuing from the inner corner of the eye down to the cheek. The outer line next to the dark brown outline is of dark pinkish flesh tone. This does not continue from the forehead as in the left cheek, but begins below the temple and extends to the chin.</p> <p><i>Mouth:</i> the shadow of the crease runs from the tip of the nose to the mouth in a double line of greenish-brown glass tessellae. Besides this shadow, the space between the tip of the nose and the mouth is mostly in high light given by whitish stones that become lightest-brown flesh-tint as they near the cheeks. The upper lip is represented by a curved row of dark rose stone tessellae. Its lower contour at the parting of the lips is shown to the right and left sides by two thin rows of burnt-sealing-wax-red glass. The lower lip is of three rows of stone: the lowest dark rose, the middle rose, and the upper shell-pink. Above the left corner of the mouth is one square glass tessella of greenish-brown and above the right corner a smaller one of the same colour.</p>
143			
144			

	Position	Detail	Particulars
145	IRENE	Head	<i>Chin:</i> directly from the edge of the lower lip is a thin line of whitish stone. A more prominent high light is given just below the outer line at the left and right of the upper lip in whitish stone. The crease below the lower lip and the modelling of the chin is made by an arched row of dark pinkish flesh tone with a short curved line of greenish-brown glass tessellae placed just below the upper middle of this arched line. There is an elliptical-shaped high light in two rows of whitish stone in the middle of the chin. A rose line of stone marks the tip of the chin next to the dark brown outline. Just above this is a longer row of shell-pink stone that extends to either cheek.
146		Hands	<i>Left hand:</i> length, 0.164 m.; greatest width, 0.085 m. Tessellae are missing from the middle of the back of the hand. The hand and fingers are outlined in burnt-sealing-wax-red glass except the tip and the lower outline of the little finger and hand which are in blue-black glass. The joining of the first and middle finger, the middle and the third finger, the third and little finger are also marked by two blue-black glass tessellae continuing the red outline. The nail on the thumb, first, and middle fingers is represented by three rose stone tessellae around one whitish stone cube. The thumb and all the fingers but the little one are represented with a row of whitish stone at the top, a middle row of light brown stone and a bottom row of shell-pink stone. At the base of the middle finger there is a fourth row of rose stone next to the lower red outline. The little finger is of two rows of stone tessellae: the upper shell-pink and the lower rose. On the back of the hand a high light is carried down along the edge of the finger bone to where it joins the thumb. The colours of the back of the hand are made by the continuation of the rows of tessellae forming the fingers. These rows beyond the middle of the back of the hand merge with the light brown tones which form the rest of the hand near the wrist. The line continuing the blue-black tessellae separating the first and middle fingers is rose stone, that continuing the tessellae at the joining of the middle and third finger is light brown stone, and the continuation of the blue-black joining point of the third and little finger is shell-pink. At the bottom of the hand there are a shell-pink and a rose line continuing to the sleeve.
147			<i>Right hand:</i> the visible parts are outlined in burnt-sealing-wax-red glass. In each finger the nail is shown by shell-pink stone tessellae around a whitish stone cube. The rows of stone tessellae in the fingers all curve at a downward angle and end in the lower left corner of the finger. The lower and two outside lines at the base of each finger are of shell-pink stone. The left rows of stone tessellae on all the fingers are of whitish stone and are carried up to the tip above the finger nails. The other tessellae in the fingers are a brownish-white stone.
148		Nimbus	Diameter, 0.555 m. The circle is drawn in large greyish-green glass tessellae, followed on the outside by a double row of gold tessellae. The background of the nimbus is of gold set in irregular concentric circles.
149		Crown	Height from top of cross to lower edge of the rim, 0.220 m.; greatest width, 0.30 m. The crown is outlined along the top and at each side by a single row of reddish-violet glass tessellae. The lower rim of the crown is made by a row of round whitish stones alternating with gold tessellae. The different sections of the crown are outlined by bands

	Position	Detail	Particulars
	IRENE	Crown	<p>edged with a row of reddish-violet glass and set with round whitish stones alternating with gold tessellae. The lower middle section contains a large jewel made of rose stone cubes edged with a single row of burnt-sealing-wax-red glass at the top and both sides, and by a double row at the bottom. The setting of this jewel and the other jewels in the crown is gold. There are no gold claws in the settings. The upper middle section contains a jewel a little smaller than that below it, made with greyish-green glass edging lighter greyish-green tessellae. The colours of the square and rectangular jewels in the upper row on either side of the large frontal jewels are from right to left as follows: green, blue, green, blue. The colours of the lower row are reversed. The green jewels in these two rows are made by greyish-green glass centred with a lighter value of the same colour; the blue jewels are of dark blue centred with greyish-blue glass. In the lower right jewel of the crown the dark blue tessellae do not continue on the left side but the lighter greyish-blue glass of the centre of the jewel is used. The top of the crown is made by alternating semicircular and triangular sections formed by the same bands of whitish stone that outline the other sections of the crown. The cross which surmounts on the gold background the upper central section is made of a burnt-sealing-wax-red glass pear-shaped tessella for its lower limb, a round greyish-blue glass tessella for the upper limb, and two round light greyish-green glass tessellae for the horizontal limbs. Similar jewels adorn the top of the crown between and above each of these semicircular and triangular sections. The jewels set between the sections are represented by a pear-shaped tessella with a round tessella placed above it and separated from it by gold tessellae. These jewels from right to left are as follows: lower tessella dark-blue glass, upper, burnt-sealing-wax-red glass; next jewels are: burnt-sealing-wax-red glass, and greyish-blue glass; burnt-sealing-wax-red glass, and light greyish-green, and lower, greyish-blue glass, with burnt-sealing-wax-red glass. The round glass tessellae surmounting the centre of each semicircular and triangular section are from right to left of the following colours: greyish-blue, light greyish-green, greyish-blue, and light greyish-green.</p> <p>At the left and the right sides of the neck adjacent to the curl and separated from it on the left side by a row of gold tessellae belonging to the background, are two rows of greenish-brown glass edging a band of round white stones alternating with gold tessellae. Perhaps they indicate the prependicularia.</p>
150		Veil	Over the hair at either side of the crown a <i>veil</i> is visible, made of rose stone tessellae with the lines of the folds drawn in burnt-sealing-wax-red glass.
151		Ear-rings	Each ear-ring is a large pear-shaped jewel of rose stone surrounded by burnt-sealing-wax-red and framed by a single row of gold glass tessellae. A lighter tone of this red is used in the right ear-ring. From the pear-shaped jewel hang three pendants made of gold alternating with round whitish stone tessellae.
152		Divitission	The collar of the divitission is of gold tessellae. The base of the collar is a band of round whitish stone tessellae set in gold and edged above and below with a row of burnt-sealing-wax-red glass. The three square jewels set in the collar are from right to left: light greyish-green glass, rose stone bordered with burnt-sealing-wax-red glass, and greyish-blue

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
	IRENE	Divitission	<p>glass. Round whitish stones representing pearls are set in the gold ground; at the top of the collar they follow the line of the chin and at the base, the line of the border.</p> <p>The stuff of the divitission is made in two tones of burnt-sealing-wax-red glass tessellae. The design on this red ground is in gold. The armlets in each sleeve are bordered top and bottom by a double band of whitish round stone tessellae set in gold and edged with a row of dark brown glass. The square jewel on each of these borders is of burnt-sealing-wax-red glass set in gold and the setting is edged with dark olive-green glass. The design on the middle section of the armlets is of curved rows of whitish stone round tessellae alternating with dark-blue glass set on the gold background. The armlets against the divitission are outlined by dark olive-green glass, and against the gold background of the panel by dark blue glass, except for the border bands which are outlined in dark olive-green glass. The middle section of the end of the right sleeve shown below the scroll is decorated in the same way as the central parts of the armlets. It is bordered on both sides by a double row of whitish round stones alternating with blue glass tessellae edged with gold. Only this edge is visible on the lower part of the left sleeve. A row of whitish tessellae forms on both sleeves a piping at their outer edge.</p>
153		Shoulder-piece	<p>The shoulder-piece has below a border set with a double row of round whitish tessellae and edged on both sides by a row of olive-brown of reversed gold and silver tessellae. In this border on each shoulder is a jewel of burnt-sealing-wax-red glass set in gold and surrounded by a line of dark olive-green glass tessellae. The rest of the shoulder-piece represents a background of gold decorated with a floriated design in dark blue glass. The upper outlines of the shoulder-piece against the gold panel background are also in dark blue glass. The two pendants hanging from each side of the border of the shoulder-piece are made of a large pear-shaped and a round whitish stone tessella each.</p>
154		Loros	<p>The loros has on either side a border similar to the lower edge of the shoulder-piece. The two jewels visible on this border are of sealing-wax-red glass set in gold and surrounded by a row of dark brown glass. Above the left wrist is seen half of a similar jewel.</p> <p>The ornamental motive adorning the gold background of the middle part of the loros is made by an uninterrupted line of deep blue glass. The parts forming volutes with flower-shaped ends, triangles and ovals are outlined with a single row of whitish stone. At the top of the loros, within the two volutes, are oval ornaments: in the right one a burnt-sealing-wax-red glass tessella is surrounded by three shell-pink stone tessellae, in the left volute are set one deep green and one light greyish-green tessella. Below each of these two volutes is a triangular decoration, centred at the right with a deep green and a greyish-green tessella, and at the left with burnt-sealing-wax-red glass and three shell-pink stone tessellae. Adjacent to the blue volutes inside the oval figure in the centre of the loros are the following decorations: the upper and lower flower-shaped ones are made of grey-green and deep green glass. The circular decoration at the right is centred with burnt-sealing-wax-red glass and shell-pink stone; that on the left with a grey-green tessella. The two triangles on either side below this oval section are centred with burnt-sealing-wax-red glass and shell-pink stone. Below these triangles are again round motives; that on the right is in shell-pink</p>

	<i>Position</i>	<i>Detail.</i>	<i>Particulars</i>
	IRENE	Loros	stone, and on the left in greyish-green and deep green glass. Still lower and above the left hand are two triangles; the right is in greyish-green and deep green glass and the left in burnt-sealing-wax-red glass and shell-pink stone. The design on the loros visible below the hand and above the belt is in dark blue glass only. The end part of the loros over the left arm is bordered on the left in the same way as its upper part; on the right are two dark olive-green glass rows merging below into one. The undulating ornament on the middle section of the loros is in dark blue and light greyish-blue glass. The alternating circular and triangular motives attached to it are surrounded by whitish stone. The volutes are centred with deep green and greyish-green glass—the triangles with shell-pink stone and burnt-sealing-wax-red glass.
155		Girdle	The girdle is made by three shades of green glass tessellae—deep green outlining it and marking the shadows of the twists in the material, greyish-green marks the lighted parts, and darker greyish-green the half-lights. The oval jewel adorning the circular buckle is of shell-pink stone set in a gold claw setting and surrounded by a single row of burnt-sealing-wax-red glass. At the upper and lower edge of each side of the girdle where it meets the buckle is a single large whitish stone tessella. The lower left stone is missing.
156		Thorakion	The ground of the thorakion is of gold tessellae. The outline against the red of the right sleeve of the divitission is a row of dark olive-green glass. The continuation of this row to the scroll marks the inner and the outer outline of the protruding fold of the divitission above the girdle. The ornamental design on the thorakion is drawn in a line of dark blue and grey-blue glass tessellae in the same way as is the design on the lower part of the loros over the arm. Within the blue lines of this design are joined ovals and triangles, outlined in a whitish stone. The joined ovals are centred with shell-pink stone and burnt-sealing-wax-red glass tessellae, as is the middle triangle. The triangles below the joined ovals are centred in greyish-green and deep green glass. There is a fragment of a flower design in the lower right part of the thorakion. It is edged with whitish stone; shell-pink stone and burnt-sealing-wax-red glass are below this whitish edge. The lower left part of the thorakion is missing.
157		Scroll	Length, 0.419 m.; width 0.065 m. Tessellae are missing on the left half of the scroll. It is outlined in greyish-blue glass tessellae. Following this outline is a row of light bluish-grey stone. The rest of the scroll is made of rows of ivory stone. The ribbon tying this scroll in the centre is of rose stone tessellae and burnt-sealing-wax-red glass. The seal at the knot of this cord is made of small gold tessellae encircling a larger round gold tessella.
158	ALEXIOS COMNENOS	Dimensions of Panel	Height of the mosaic on the north side of the pilaster from fillet above the panel to the marble facing on the wall below, 2.46 m.; width from return of wall to edge of mosaics on pilaster, 0.6 m.
159		Dimensions of figure	Height from top of the cross on the crown to the lower edge of the preserved part, 1.02 m.; width at shoulders, 0.44 m.
160		Head	Height of head from top of the cross of the crown to the tip of the chin, 0.345 m.; width, 0.16 m.

	Position	Detail	Particulars
	ALEXIOS COMNENOS	Head	
161			<i>Damaged parts:</i> a narrow stripe 5 cm. to 6 cm. wide along the rounded angle of the panel, the entire figure from a little below the waist, a few cubes are missing in different parts of the face, part of the right eyebrow, inner corner of right eye, inner and outer corners of left eye, left side of the nose, upper lip, part of left cheek and lower part of the chin. The tessellae used for the background of this panel are of the same size, quality, hue, and are set in the same way as the gold tessellae of the background of the larger adjoining panel. <i>Colours of face:</i> the face is outlined on either side by a single row of olive-brown tessellae. Two tones of olive-green and light brown are used for shadows; half-tones and lighter parts of the face are in three tones of rose, light grey-green, and varying tones of brown. Some contours are drawn in two shades of burnt-sealing-wax-red glass tessellae, other contours in darkest blue-black glass. High lights are in whitish stone tessellae. The face is represented in a diffused light and is modelled in light half-tones. The size of the tessellae used in the face varies from 5×6 to 1.5×2 mm.
162			<i>Hair:</i> the contours of the locks are in the blackest-brown tessellae. Between these dark outlines the space is filled with large olive-brown glass tessellae for half-shades and olive-green ones for lighted parts. Along the sides of the face a gradual transition of colours is used to separate the curls from the flesh.
163			<i>Forehead:</i> in its upper part below the rim of the crown and along the right and left temples it is drawn in light and dark olive-brown tessellae. The left upper part of the forehead is made in three rows of rose tessellae of which the lower is the lightest. Also in light rose are the prominent parts of the forehead above the eyebrows. The rows of this colour descend obliquely towards the middle part of the forehead, ending above the wrinkle of the bridge of the nose. Between these lines and the eyebrows the high lights are marked by a curved row of whitish stone. High lights are equally above the rose contour of the right prominent part of the forehead and in its middle part. Above the right brow are used two different tones of greyish-yellow and rose.
164			<i>Eyes:</i> the eyebrows are in deep olive-brown in their upper part, and darkest brown-black in their lower part. The same brown-black tessellae are used to indicate the upper eyelashes, the contour of the iris and the pupils. The iris is in light brown. The space between the brows and the upper lids is in greyish-yellow stone tessellae. The upper lids are light rose in their upper part and light grey below. The lower lid is made in the same two colours. Most of the tessellae are missing from the whites of the eyes. Whitish stone cubes still remain at the outer corner of the right eye and the inner corner of the left eye. The lower lashes are in deep olive-brown.
165			<i>Nose:</i> the contour of the nose and of the wings is drawn in one row of small burnt-sealing-wax-red glass tessellae. The bridge of the nose is in olive-green. To the right of this outline is a vertical row of light rose stone. Next to this row following the ridge of the nose is a row of whitish stone tessellae showing high light. To the right of this line the lighted side of the nose is made by a row of light greyish-yellow tessellae and adjacent to it a row of light olive-green tessellae beginning a little higher than the inner corner of the right eye. This row ends above the wing of the right nostril. The wings of both nostrils and part of the tip of the nose are made by light greyish-yellow stone tessellae. The nostrils are indicated by a small brown-black tessella. The left side of the nose is in light greyish-green glass: part of this row has lost its cubes.

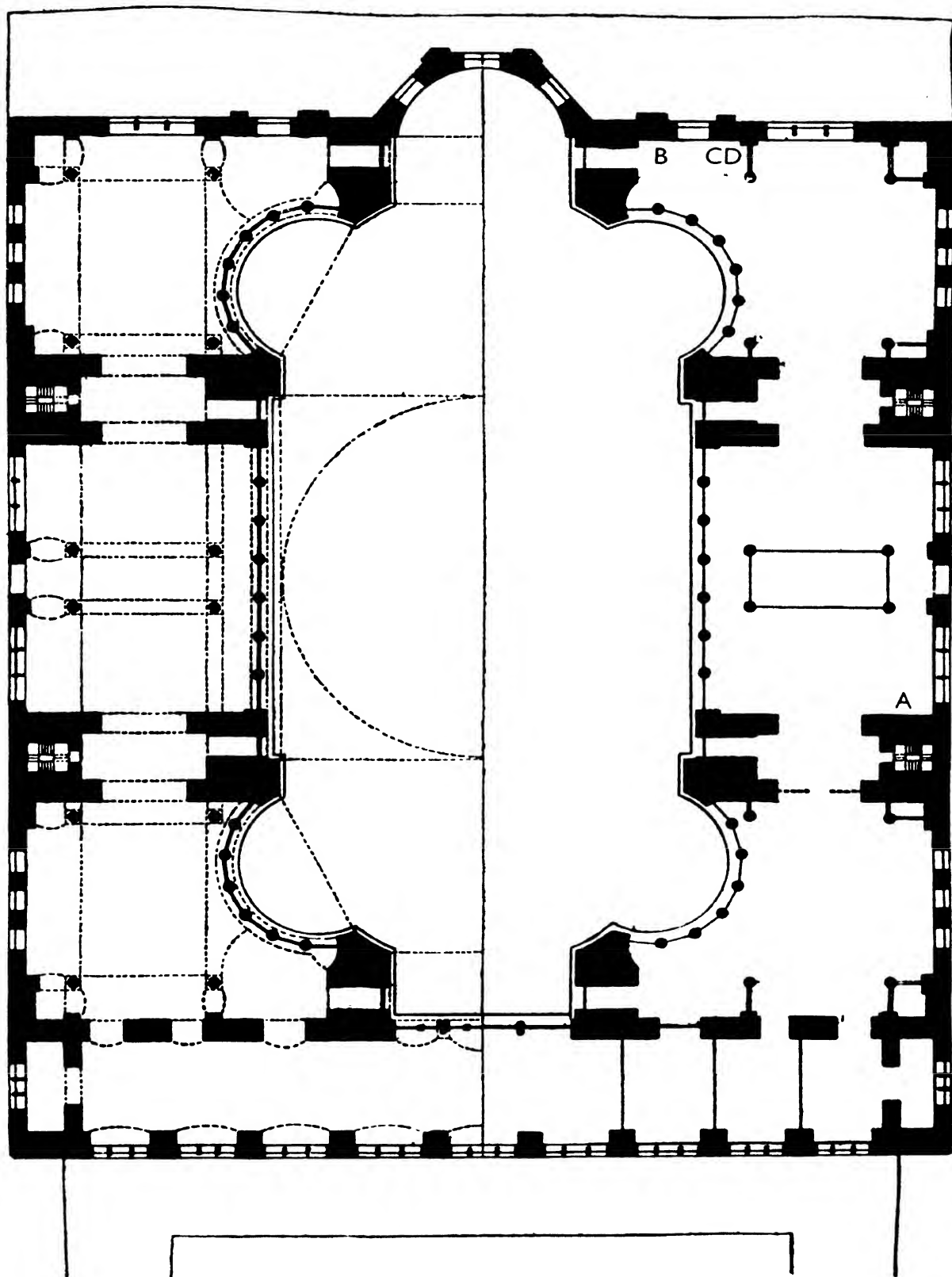
	Position	Detail	Particulars
166	ALEXIOS COMNENOS	Head	<p>The high lights except the one on the ridge of the nose, mentioned above, are shown by short strokes of a whitish colour near the upper outline of the right and left wing and under both nostrils.</p> <p><i>Cheeks:</i> the olive-brown contour of the cheeks is followed on either side of the face by a row of light olive-green tessellae, which on the right cheek starts near the temple and on the left one a little lower than the outer end of the left brow. They both end near the tip of the chin. Below the whitish high light under the eyes and near the sides of the nose, the flesh of the cheeks is rendered by alternating rows of greyish-yellow and rose stone tessellae. The lower parts of the cheeks are in light greyish-yellow tessellae.</p>
167			<p><i>Mouth:</i> the parting of the lips is drawn by a row of small scaling-wax-red glass tessellae. A small brown-black cube set at both ends of this row marks the shadowed corners of the mouth. The upper lip is shown in one row of large light brown tessellae, some of which are missing. This row is interrupted in the middle by a thin semicircular row of small whitish stone tessellae rendering the high light under the crease above the lip. The flesh above the corners of the mouth is formed on each side by a slanting row of light olive-green tessellae above which is a row of greyish-yellow tessellae. The lower lip is shown by two rows of rose stone, the upper row is lighter in tone. A short thin stroke of high light is marked under the two corners of the mouth; under the left corner this stroke is followed from above by a row of greyish-yellow tessellae.</p>
168			<p><i>Chin:</i> curved rows of greyish-yellow stone tessellae form the upper part of the chin between the lower lip and the crease in its middle. A large high light illuminates the centre of the chin. This is made by three rows of whitish stone tessellae. The crease above this high light is in olive-green. The lower part of the chin and its left side are formed by two rows of rose stone, the upper being of a lighter tone. On the right side the chin has been slightly damaged.</p>
169		Hand	<p>Only the right hand is preserved. Length, 0.127 m.; width, 0.086 m. The outline of the upper part of the hand, the thumb, and the first three fingers is made by a row of small burnt-scaling-wax-red glass tessellae. From the joint of the third finger and along the lower part of the hand the contour is drawn in brown-black glass tessellae. Cubes of the same brown-black colour are set at the base of the parting between the fingers and form the upper outline of the forefinger separating it from the stem of the sceptre. The red outline of the upper or left side of the hand is followed on the inside by a row of olive-green glass tessellae. The shaded lower part of the hand and fingers is rendered in greyish-olive and olive-green tessellae similar to those used for the lighted parts of the hair. Rose tessellae give the transition of shadow into light. The latter is given in light rose, greyish-yellow, and whitish tones. The tendons on the back of the hand are clearly seen in rows of rose stone tessellae.</p>
170		Crown	<p>Height from top of the cross to lower rim, 0.155 m.; breadth, 0.22 m. The entire contour of the crown and of its different parts is outlined by a thin row of reddish-violet glass tessellae of the same tone as those used in the vestments. Two different kinds of gold are used for the crown: the gold ground of the circlet and of the frontal vertical section is of greenish-gold cubes, whereas amber-gold glass similar to that of the general background is used in the upper part of the crown. The upper</p>

	Position	Detail	Particulars
			<p>and lower edge of the circlet are bordered by a double row of reddish-violet glass tessellae, between which is set a row of round whitish stone tessellae alternating with gold tessellae. The gold background of the circlet is adorned with a double row of pearls—round whitish stone tessellae. A border similar to the one of the circlet frames the frontal section of the crown on all sides and divides it horizontally into two uneven parts. In the lower and larger square compartment a jewel is represented by a light blue opaque cube, and surrounded by a row of gold tessellae. In the upper semicircular compartment is a jewel indicated by deep red glass tessellae also set in gold. The lower rim of the crown is drawn by a similar row of gold tessellae. The cross surmounting the crown is made of four pear-shaped whitish stone tessellae set with their narrow ends to a gold centre. The two prependicularia, 0.22 m. long, hanging at either side of the crown are represented by whitish stone tessellae, alternating with gold cubes. Each prependicularia is terminated in a cross of four pear-shaped whitish stones of the same size and design as those on the top of the crown. The setting-bed of the crown reveals that the crown was carefully drawn first in <i>fresco</i> paint on the smooth plaster. The central jewel was painted in red, while the gold was shown in yellow.</p>
171		Nimbus	<p>The diameter is 0.494 m. The circle is drawn in one row of large green opaque glass tessellae. It is outlined by a double row of large gold tessellae. The background inside the nimbus is filled with gold tessellae the size and colour of which are different from the gold tessellae used in the background of the panel. The average size of these tessellae is 0.01 × 0.009 m. The cubes are made of greenish translucent glass giving the gold surface a greenish hue, differing from the gold general background. Several tessellae have lost their gold and give the surface of the nimbus a mottled greenish hue.</p>
172		Chiton	<p>The high collar of the chiton is made of two kinds of gold tessellae: in its lower part the same gold is used as for the background; the rest of the collar is in the greenish hue of gold as in the nimbus. The collar is adorned with four rows of round whitish stone tessellae. The left side of the collar is outlined by a row of reddish-violet glass tessellae; its right edge is covered by the dark brown contour of the hair. The cuff adorning the sleeve is of gold with shaded parts in deep red glass, and the border separating the gold sleeve from the hand is drawn by a row of reddish-violet tessellae. A similar row marks the lower edge of the cuff. The rectangular jewel adorning the middle of the cuff is made of light green and darker green tessellae. The setting is of gold. Two round whitish stone tessellae are at the left of the jewel. At the contour of the hand near the wrist is seen a small wedge-shaped row of whitish tessellae representing a fragment of a white sleeve of an undergarment worn under the chiton.</p>
173		Divitission	<p>The stuff of the divitission is in reddish-violet glass tessellae; the design woven into the fabric is represented in amber gold, the contour of the sleeves in dark blue tessellae. Little is left of the gold and jewels adorning the upper part of the sleeves. The ornament on the gold background consists of lozenge-shaped blue and green jewels made by glass tessellae framed in gold and separated one from the other by narrow bands of burnt-sealing-wax-red glass tessellae. Round whitish stone tessellae are set on this red background.</p>

	<i>Position</i>	<i>Detail</i>	<i>Particulars</i>
174	ALEXIOS COMNENOS	Shoulder- piece	The gold background of the shoulder-piece is divided as in the vestment of the Emperor John Comnenos into rectangular sections and is bordered by jewelled bands of identical design and colours. The gold tessellae are of two different kinds: for the right side of the shoulder-piece are used greenish-gold tessellae of the nimbus, on other parts are amber gold tessellae of the general background. The edge of the shoulder-piece is adorned with pendants—pear-shaped and round whitish stone tessellae. The contour of the shoulder-piece is made in one row of large dark olive-brown tessellae.
175		Loros	Again the two kinds of gold tessellae are used for the loros and the setting of the jewels. The amber gold of the general background is used for the frames surrounding the jewels; all other parts of the loros are in the greenish-gold of the nimbus. The square sections are drawn by the same narrow bands of whitish stones on a gold background edged with reddish-violet tessellae as on the shoulder-piece. At their intersections are small square red jewels in a gold setting, without any claws. The large rectangular jewels are made in two tones of glass tessellae, the lighter being in the centre. Starting from the upper row and from right to left they are: first row: green and blue; second row: blue and green; in the next rows the jewels are in the same alternating sequence. A small fragment of the transversal part of the loros remains. It has the same design as the vertical part. A fragment of a jewel in a gold setting is still visible. The edge of the loros is adorned with whitish stone tessellae as pendants of the same pear-shaped stones as those on the shoulder-piece.
176		Sceptre	Height from the cross surmounting the sceptre to its lower end, 1.03 m. The stem is represented by a row of gold tessellae, and is shaded on the left by a row of burnt-sealing-wax-red glass tessellae. The upper end of the cross is formed by four round whitish stone tessellae fixed to a pear-shaped whitish stone set with the narrow end downwards. At the left of the latter is a round whitish stone tessella; the one at the right has fallen out. Lower down the sceptre is adorned with jewels in gold settings made of small gold tessellae of the same hue as used in the background of the mosaic. These gold settings are surrounded by a row of burnt-sealing-wax-red glass tessellae. The jewels vary in shape, form and colour. Starting from the top is an oval light green jewel, next is a light blue oval one, below, the sceptre has been partly damaged; lower down is an elongated light green jewel, next a lozenge-shaped light blue one, below it an almost round green jewel and finally a conical blue one fixed by its base to the stem. Two round whitish stone tessellae are set between each pair of jewels, close to their red setting. The end of the sceptre as well as of the adjacent area has been damaged.
177		Inscription	The lettering is rendered in one row of large red opaque glass tessellae followed on either side by a row of gold; the setting-bed under the red tessellae was painted in blue, the mosaic inscription following closely each stroke of blue paint.

SETTING-BED

<i>Colours</i>	<i>Subject in Tessellae</i>	<i>Colour Indication on the Setting-bed</i>
GOLDS	General panel gold ground. Gold ground of thorakion.	Deep rose of marble. Earth yellow (raw sienna, yellow-ochre, or warm slightly brownish-yellow).
REDS	Burnt-sealing-wax-red.	Indicated by virtually the same burnt-sealing-wax-red as found in the tessellae. Chemical change may have resulted in the greyish or bluish dull red found indicating other areas of burnt-sealing-wax-red tessellae.
ROSE	Rose centres of jewels.	Indicated by the same rose as the general gold ground.
GREEN	Green in jewels.	The green appears slightly greyer than the tessellae themselves.
REDDISH-VIOLET	Divitission reddish-violet. In cross on thorakion.	Indicated in a bluish-grey. Deep, reddish-violet.
VIOLET-BLUE	Robe of Christ.	Tessellae and setting-bed almost identical.
GREY	Shade of thorakion (on Zoe's right).	Virtually the same colour.
BLACKEST VIOLET	Outlines of figures, &c.	Same blackest violet.
FLESH TONES	Rose marble in faces and hands, &c.	Same rose as marble.
WHITISH STONES	Pearls.	Whitish stones indicated by circular impressions deeper than the ordinary-sized tessellae. Probably indicated in red. The blue outline of the whitish stones probably not indicated.

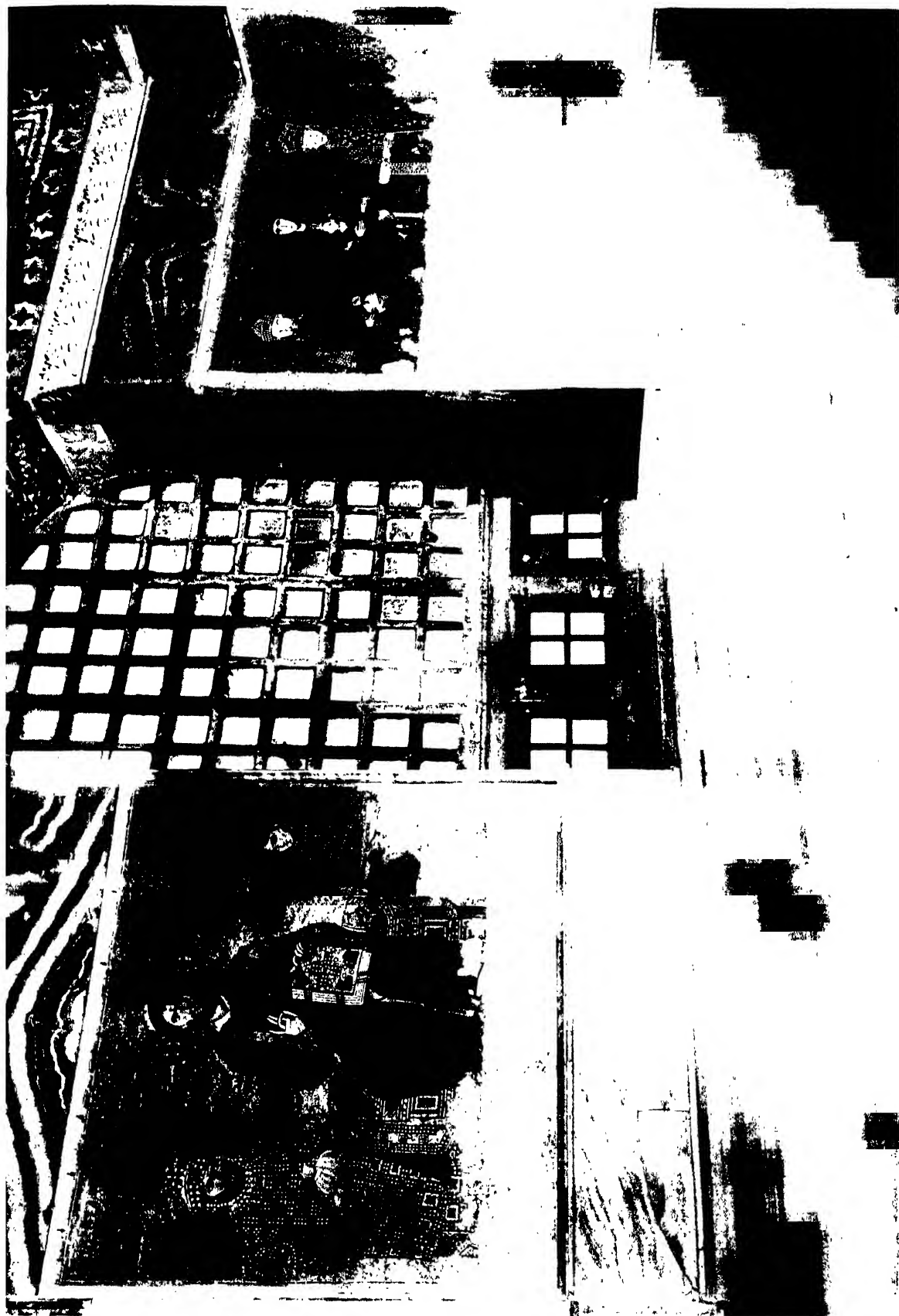


PLAN OF GALLERIES IN HAGHIA SOPHIA

Reproduced from Lethaby and Swainson: 'The Church of Sancta Sophia, Constantinople'



THE EAST END OF THE SOUTH GALLERY



GENERAL VIEW OF THE IMPERIAL PANELS IN THE SOUTH GALLERY



ZOE PANEL





ZOE PANEL: HEAD OF CHRIST



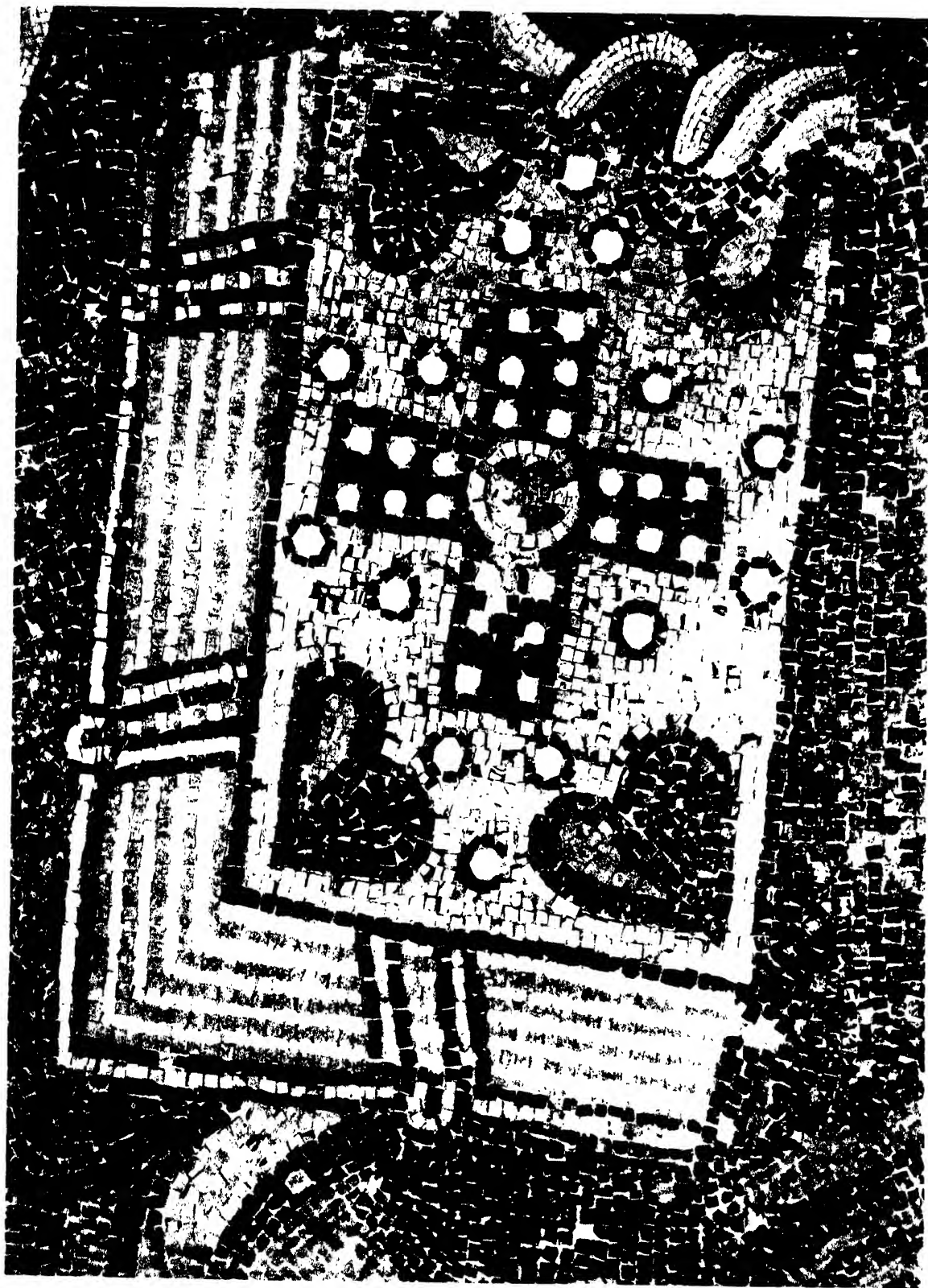
ZOE PANEL: FACE OF CHRIST



ZOE PANEL: BLESSING HAND OF CHRIST

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ZOE PANEL · BOOK OF THE GOSPELS





ZOE PANEL: CONSTANTINE IX MONOMACHOS



ZOE PANEL: HEAD OF CONSTANTINE IX



ZOE PANEL: FACE OF CONSTANTINE IX



ZOE PANEL THE PURSE



ZOE PANEL: THE EMPRESS ZOE



ZOE PANEL: HEAD OF ZOE



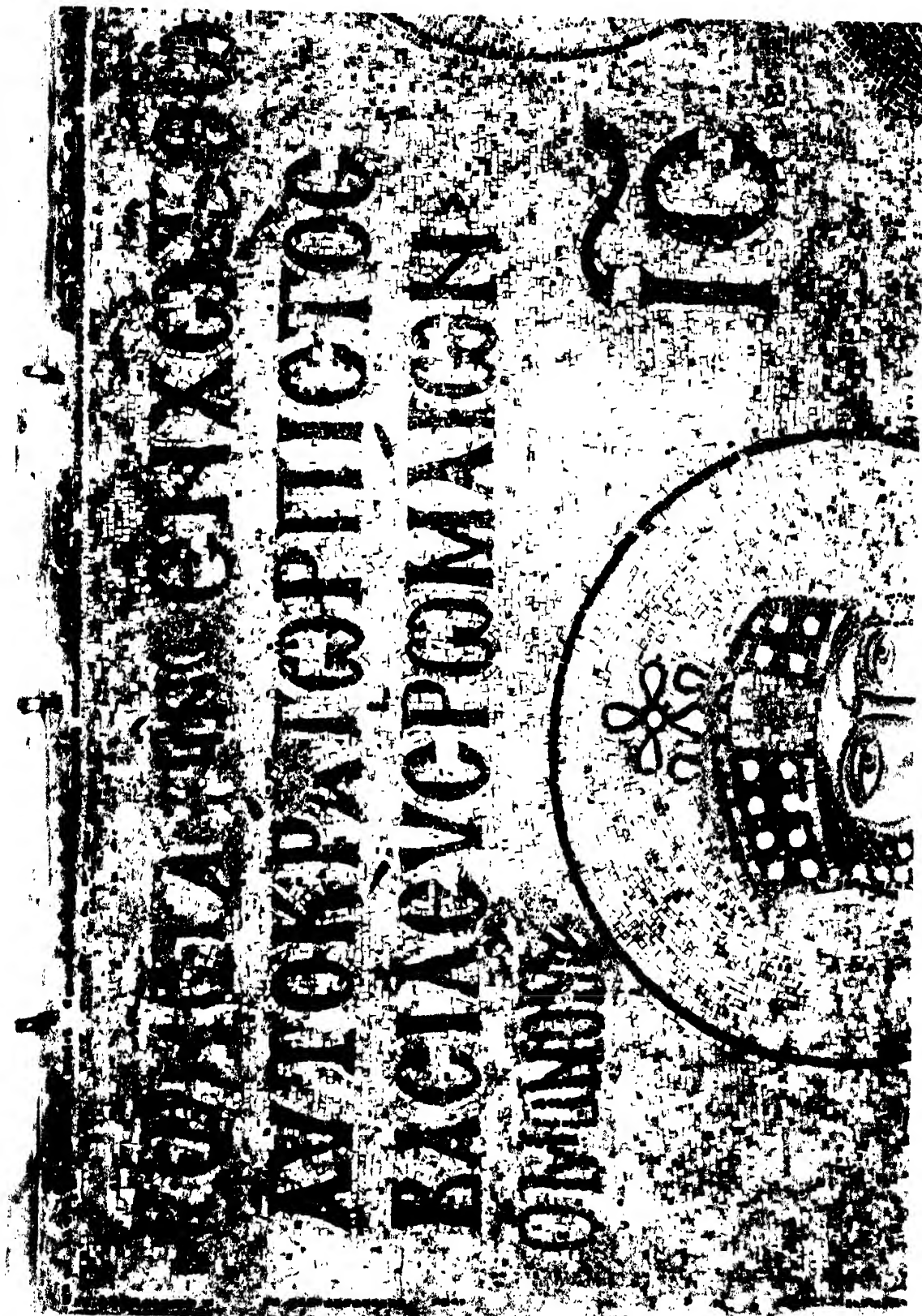
ZOE PANEL: FACE OF ZOE



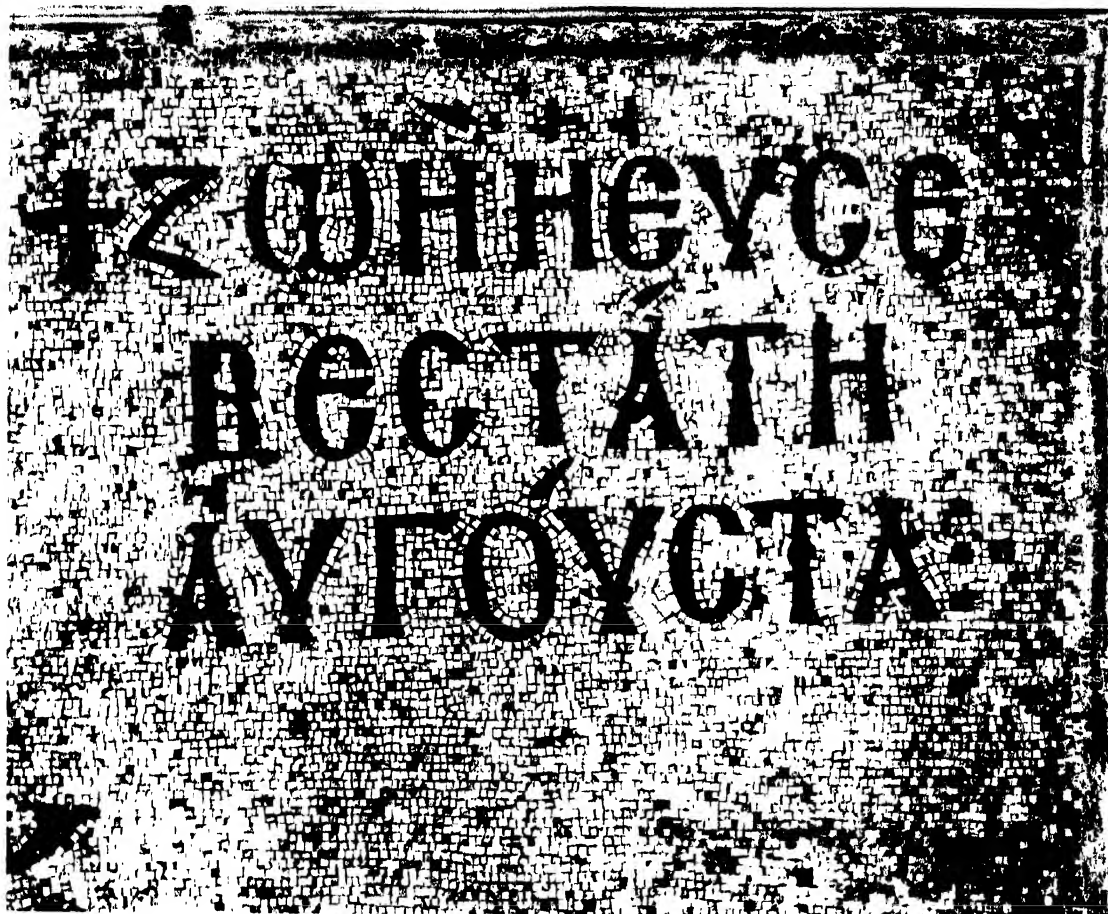
ZOE PANEL: THE SCROLL AND THE LOWER PART OF THE FIGURE OF ZOE



ZOE PANEL: RECONSTRUCTION DRAWING OF THE LOWER PART OF THE
FIGURE OF ZOE

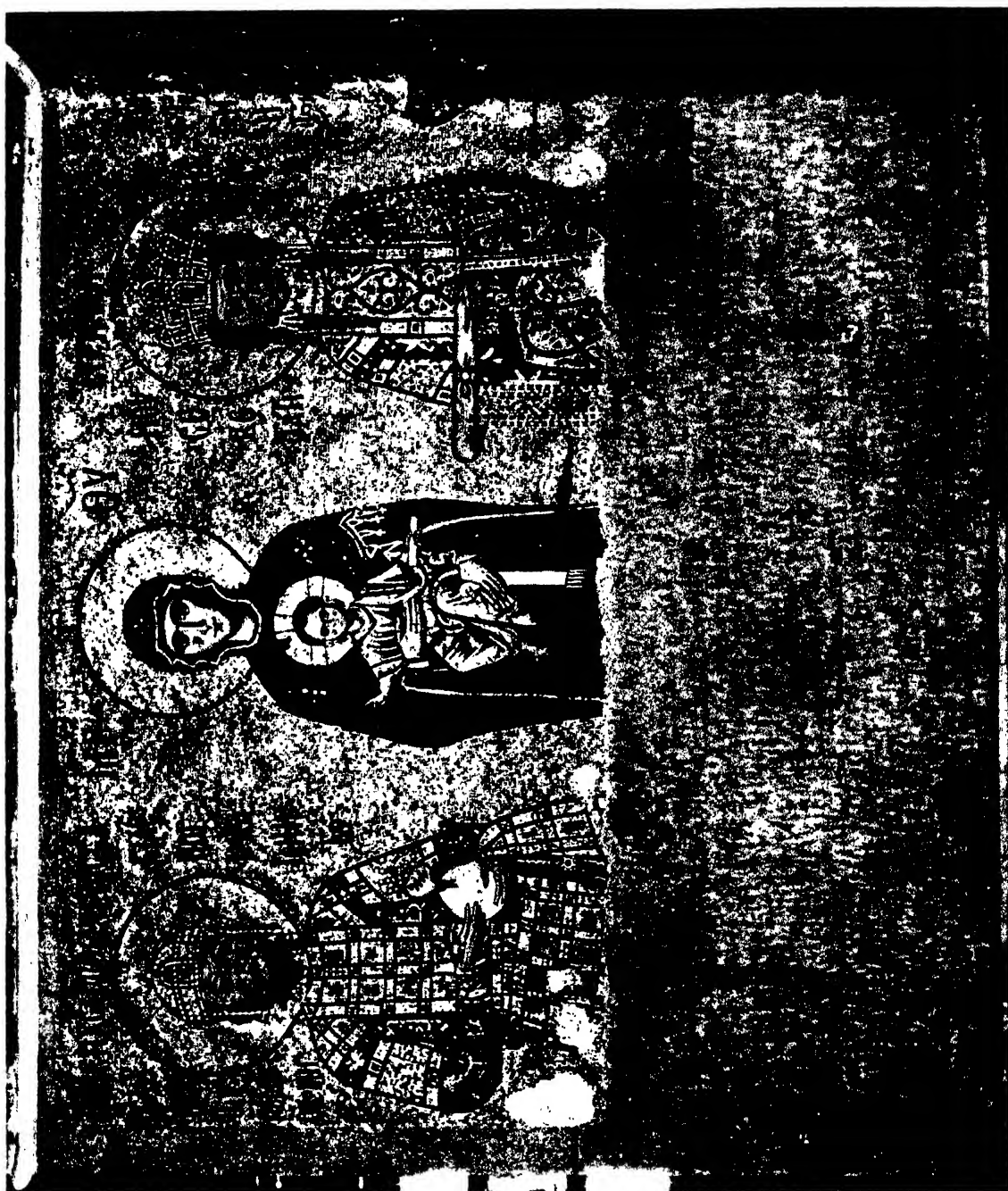


ZOE PANEL; INSCRIPTION ABOVE CONSTANTINE IX



ZOL PANEL: INSCRIPTION ABOVE ZOE

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JOHN PANEL





JOHN PANEL: THE MOTHER OF GOD



JOHN PANEL: FACE OF THE MOTHER OF GOD

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JOHN PANEL: THE CHILD





JOHN PANEL: HEAD OF THE CHILD



JOHN PANEL: JOHN II COMNENOS



JOHN PANEL: HEAD OF JOHN II



JOHN PANEL: FACE OF JOHN II





JOHN PANEL: THE PURSE



JOHN PANEL: THE EMPRESS IRENE



JOHN PANEL: HEAD OF IRENE



JOHN PANEL: FACE OF IRENE



JOHN PANEL: SCROLL HELD BY IRENE



FIGURE OF ALEXIOS COMNENOS WITH PART OF INSCRIPTION ON ADJACENT WALL



HEAD OF ALEXIOS



FACE OF ALEXIOS



FOSSATI'S DRAWING OF THE IMPERIAL PORTRAITS



FOSSATI'S DRAWING OF THE MOSAIC FIGURE OF THE
EMPEROR ALEXANDER

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